Title: Streamlining Support Services through Web-based Technologies (USER)

Funding: 1997-1999 $1,812,722  
1999-2001 $3,079,520

Reviewers: John F. Walsh, Director of University Information Systems, Indiana University  
Kenneth Anderson, School of Public Health & Community Medicine  
Donna Devine, School of Medicine

Introduction

The University Services Renewal (USER) Project was one of the initial projects funded by the University Initiatives Fund (UIF) in the 1997-99 biennium. Funding was renewed and increased during the 1999-2001 biennium. The funding committed during this four-year period was from a combination of UIF and other UW funds. The original and continuing goals for the USER project include major improvements to the UW business enterprise technology infrastructure and several improvements to UW service areas, including human resources, grants and contracts, goods and services acquisition, and travel procedures. The 1997-99 UIF award and supplement were used for the technology infrastructure and payroll/human resources service areas. The continuation of the UIF award, together with another supplement, are being used during 1999-2001 to continue working toward the goals established in 1997-99.

The first steps of the USER project involved major changes to the technology infrastructure component in order to facilitate the future development of Web-based business systems. Wide-ranging discussions were held concurrently with both UW central services and unit-based users as a means of prioritizing administrative system changes. The initial technology infrastructure improvements consumed most of the first biennium. Improvements included acquisition and installation of system hardware and operating and applications software, including development of logical data models, and the acquisition of SQL servers. While those efforts were significant, and imperative for the success of USER, they are not visible to the general UW community. These technology infrastructure improvements will require a substantial and ongoing commitment of resources by University leadership in order to be sustained.

Once the basic infrastructure was in place, system improvements were undertaken. The first visible products were in the payroll system, with the development of the on-line distribution change entry modules for the PAF (personnel action form) and the PERM (post-entry review message). During the second (current) biennium, USER is continuing to improve the PAF process, with the ultimate goal of completely eliminating paper transactions, resulting in a totally on-line payroll change process. Other USER products delivered in the current biennium include: an on-line employee self-service module for use in accessing personnel information, a mechanism for setting up early email for new employees, human resource on-line look-up for earning types, a UW hiring guide and salary tables, and desktop computer access points for employees who do not normally use computers for their daily work.
**Strengths**

In a meeting with President McCormick, Provost Huntsman, and Vice Provost Patterson at the close of the site visit on December 19, 2000, the review committee noted that the basic strategy being pursued by the UW to support the transformation of its administrative information processes is appropriate and innovative.

The leaders of the USER project, both in Office the Executive Vice President (EVP) and Office of the Vice President for Computing and Communications (C&C), are to be congratulated for establishing a supportive, forward-looking, process improvement environment. Also to be congratulated are the many dedicated volunteers, both in central administration and throughout the University, who have contributed thousands of hours to making USER successful. This is amply demonstrated by the creation of a new information infrastructure and production of project deliverables during the first two biennia.

The foresight of C & C and EVP in developing the technological infrastructure for Web-based applications, rather than purchasing an expensive all-in-one software package designed to replace the aging legacy administrative systems, has allowed the UW to prepare for the next level of system improvements at relatively low cost. It is becoming almost mandatory to migrate administrative information systems to a Web-based model for user interaction with administrative information systems. The USER project, which produced the on-line PAF process, is an excellent example of this type of technological advancement.

The Web-based applications developed as part of the USER project provide UW departments and schools with the ability to better meet their needs for information management. The USER concept has also stimulated many other positive administrative systems products for the UW, which are referred to as “inspired by USER” but are not funded directly by the UIF. Examples of these products are the UW ProCard program (a streamlined purchasing system) and MyUW, the new Web portal for the entire UW community.

Another positive result of the USER project has been the creation of a “culture of change” at both central administrative and end-user levels. Because of the widespread use of volunteers, a spirit of ownership and cooperation has been established. This team spirit goes well beyond the USER project itself, and has provided a platform for launching change in other administrative systems throughout the UW. Much of this success is due to the well-planned training, communication, and end-user feedback mechanisms established by USER leadership. Thus, a planned response to technological change has fostered a positive cultural shift across the UW community, whereby change is not merely accepted as a necessity but is embraced as an opportunity to move forward positively. This team spirit is pervasive and continues to thrive, and it is important that UW leadership support and nurture this environment.

**Challenges**

The basic information technology improvement strategy, as outlined to the reviewers during the site visit, is sound, and in fact, notable among major higher education institutions today. However, the committee saw two major challenges to the continued success of the UW strategy.

2
The first is whether USER can scale to the next level. The successes to date have engendered a campus-wide culture of empowerment and steeply rising expectations of continuing improvements and products. Second, there are issues of leadership and ownership to be considered. Clear lines of accountability and communication will greatly enhance the potential for ongoing success. These challenges could be addressed in large measure by the creation and publication of a strategic plan describing how C&C will continue to support the administrative information systems transformation now under way.

Such a strategic plan would enhance C&C’s ability to execute what is an excellent and innovative information technology strategy as well as align C&C and institutional administrative systems goals in a very visible way. Moreover it would also highlight the importance of C&C’s increased resource needs, focus priorities for the C&C organization, and foster even closer ties among C&C and other functional administrative systems areas. The plan might address the following specific questions:

- What are the plans to resolve the potentially conflicting Microsoft and Java Web infrastructures? The former is the platform for the first USER implementation, while the latter is projected as the platform for the emerging MyUW Web portal initiative that will support the financial workbench and perhaps other future administrative information processes. If both software systems are to be retained, what are the resource implications for Web and application server hardware/software, enterprise database products, and C&C staffing?

- How specifically will the Unisys-based legacy systems be migrated/replaced and by what?

- What specifically is the strategy for creating and maintaining the planned data warehouse environment?

- What are the lifecycle cost plans for hardware, software, and databases?

**Recommendations**

I. The overall success of these USER initiatives thus far strongly suggests that funding should be continued over the next biennium, through June 30, 2003, at the current level of funding, which is $1.5 million per year.

II. Funding beyond June 30, 2003 should be contingent upon development of a plan for administrative information systems. This plan, an important part of which would be the C&C strategic plan mentioned above, should address:

- business processes to be targeted and their supporting systems,
- technical infrastructure,
- evolution of the legacy systems,
- budget projections and funding sources.

III. The Committee recommends that the Office of the Provost, the Office of the Executive Vice President, and the Office of the Vice President for Computing and Communications work together to prepare this plan.