

April 29, 2003

David B. Thorud
Acting Provost
Office of the Provost
Box 351237

Dear David:

In a letter dated December 20, 2002, you requested that I and my colleagues in Computing & Communications define the choices for administrative computing at the University of Washington, outline options and risks, and make a recommendation.

The attached document, *Strategic Choices for Administrative Computing at the University of Washington*, has been prepared in response to your request. It details our analysis of the strategic choices and their risks and benefits based upon research studies as well as our own experiences and those of our peer institutions. This letter summarizes that analysis.

The UW, like many institutions of higher education, has a choice between two strategies for its core business systems:

- **The ERP approach:** Implement Enterprise Resource Planning (ERP) systems, using vendor supplied software to provide enterprise-wide systems for student, human resources/payroll, and finance.
- **The non-ERP approach:** Continue with the university's current approach of renewing and extending the institution's existing legacy systems. Some at the UW have termed this the *heritage* approach.

The UW either can continue to make the incremental investments necessary to support the current non-ERP approach, or it can commit to the substantial investments necessary to implement ERP systems. Either choice will require investment. The question is, which choice represents the right investment for the university?

ERP implementations have many clearly documented risks. They are costly, highly disruptive to the institution, and channel resources away from other high-priority projects. Although a majority of institutions that undertook ERP installations at least partially realized their goals, according to one study, the systems cost more than originally planned, workloads actually increased in the short-term, and efficiencies did not translate into cost savings. In addition, larger institutions were less likely to finish the project on time and on budget.

The non-ERP approach can deliver significant improvements to business processes and systems without the major upheaval of an ERP implementation and still allow the institution to pursue other priority information technology enhancements. The non-ERP approach also allows institutions to make improvements incrementally, according to their own needs, priorities, and resources. With an ERP approach, the opposite is true. Once an institution commits to an ERP approach for one of its core administrative systems, the entire system must be replaced.

The university has already demonstrated the viability and value of the non-ERP approach through implementation of Web-based student services in MyUW, improvements to the human resources/payroll system made as part of the University Services Renewal (USER) project, and other initiatives. This approach has allowed the university to harness the knowledge and abilities of its administrative and technical staff to develop processes and systems that work within this institution's environment. In contrast, the ERP approach would require the university to change its current business practices to conform to those dictated by ERP software.

The biggest risk with the non-ERP approach lies in failing to make the human and technology investments necessary to keep the existing application software responsive to university business requirements and to keep the complex supporting computing environment technologically current and reliable. While the UW has made some incremental investments in its administrative systems to keep them responsive and technically current, funding is less than adequate for this area and for the technical infrastructure that supports these systems. Additional investment will be necessary to sustain the UW's non-ERP approach.

Implementing an ERP system would be extremely costly and challenging for this institution, particularly in light of the current stark funding environment. It is our belief that continuing with the university's current non-ERP approach will be more economical, will involve less risk to the institution, and will continue to meet the UW's administrative computing needs into the future. However, failure to adequately invest in the current non-ERP strategy will eventually cause the current systems to deteriorate to such a point that the university will be forced into an ERP approach.

I and my colleagues therefore recommend that the university continue with the current non-ERP approach and make the incremental investments necessary to maintain the ongoing viability of the UW's legacy systems, as outlined in the attached document, *Strategic Choices for Administrative Computing at the University of Washington*.

Specifically, the university should consider the following:

- **Freeze new development projects for FY 2004 and reallocate resources to stabilize systems and infrastructure in current high risk areas.** The UW's technology environment has reached a level of complexity where system restructuring and upgrades are necessary in order to stabilize these systems, keep them responsive, and sustain them into the future. However, staffing levels are currently insufficient to allow this work to be accomplished and, at the same time, take on any new project commitments.
- **Increase investment in technical infrastructure and staffing support.** The growing complexity of the UW's administrative systems and rising demand for new administrative applications have placed a corresponding load on the technical infrastructure and associated support staff. However, investment in this area has not kept pace with these increased demands.
- **Increase investment in administrative systems applications staff.** Staffing deficiencies in this area are making it difficult to keep the UW administrative systems responsive to business needs, provide backup on critical administrative systems, and address a substantial backlog of deferred systems maintenance.

We appreciate the opportunity to provide input on a subject of vital importance to the UW's administrative operations. We look forward to discussing this issue further with you and others in the UW community.

Sincerely,

Ed Lightfoot,
Director, Information Systems
Computing & Communications
Box 354842

Attachments: Document and appendices

cc: Lee L. Huntsman
Debra Friedman
Weldon Ihrig
Ron Johnson
Harlan Patterson
Gary Quarfoth