

Portals: The Lady or the Tiger?

This is another in a long list of articles about portals. As I ponder my contribution to this ongoing discussion, I have decided to write from the stadium floor. Remember the fable about the gladiator who had to choose between two doors in the stadium? If he chose one door, he would be greeted by a beautiful lady who would serve him. If he chose the other door, he would be confronted by an angry and hungry tiger. This was a tale dear to my heart in elementary school (before we knew about sexism and political correctness). No one ever told us the answer, however. We had to imagine which door the gladiator chose.

Today, as we build portals for higher education communities, are we confronting the lady or the tiger? The answer, as for the myth, is ambiguous. At the University of Wisconsin-Madison, we tell a very exciting story about the integrated, user-friendly environment that our portal offers our student community. That story is real. We have a well-used feedback button on our portal. We receive more positive feedback than criticism. We also receive practical feedback, and we partner with student service organizations on campus to manage the feedback. Not all students are equally pleased. Periodically, we receive criticisms: "My UW-Madison is so stupid. It is too slow. Why are you people so dumb?" And this isn't the bloody part of the story.

Our portal implementation has been a fast-track implementation. It began about two years ago with a simple vision: link-

ing course Web sites to the class list for students. We implemented a limited portal for a limited student community, using Epicentric as our portal platform. Our ad hoc advisory group was dreaming about what could happen next. Concurrently, our information architects were dreaming about an architecture that would support single sign-on, with scalability and security. We also were working with the Human Resources Department on a Universal Directory Service (UDS) for the campus. As we dreamed, we continued to look at the portals being developed at UCLA, the Harvard Faculty of Letters and Sciences, the University of Minnesota, the



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University of Washington, and the University of Michigan. We were also paying attention to the work of our colleagues in the JA-SIG uPortal project.

Real challenges—some political and some technical—began when we determined that for our portal to be very useful to students, it needed to include course enrollment. UW-Madison course enrollment was telephone-based. Student surveys indicated that online course enrollment was the most desired new feature. A key question—one difficult to resolve—was: Do we implement Web-based course enrollment in the portal now, based on an integrated student information system (ISIS) that would encounter a major upgrade in one to two years, or do we wait for the new version of ISIS before implementing Web-based course enrollment? We decided not to wait. Web-based course enrollment, piloted in fall 2001, will be fully implemented in spring 2002. We expect to upgrade the ISIS in summer 2002, requiring changes to our portal-based course enrollment. We anticipate an improved student interface and additional features. The implementation was a success, but we shed political and technical blood here. We met both the tiger and the lady.

Meanwhile, we purchased a new e-mail product that would scale almost infinitely, with ongoing vendor support and documentation. It was easy to bring the system up for a small cadre of students—our 6,000 new students last summer. The process became much harder as we considered converting the remainder of our campus accounts (another 50,000 or so). The accounts would need a new e-mail service integrated with our new directory service, available as both client-based mail on the desktop and Web-based mail as part of the portal. We ran into network-level problems, hardware capacity problems, timing problems, tuning problems, software integration problems, and more. Rollout of our faculty-staff version of the portal has been delayed until we prove to ourselves that we have solved these problems. In this area, both doors seemed to have tigers behind them.

We have experienced some easier successes as well. We implemented a new calendaring application as part of the portal. We added “what-if” capability

from the degree-advising system, enabling students to learn how well their completed courses would support a change in majors. And the help-desk aspect functioned very well: early on, professional and student help-desk staff helped define the capabilities of the portal and participated in training.

The real challenge in this portal issue is system integration. We are trying to implement single sign-on and to integrate systems—some with their own sign-on schemes and some with no sign-on schemes. We are enabling LDAP applications that don’t want to be enabled. We are migrating to one NetID and password. All departments on campus want the system to be the one they have put in place for “their” applications. To address technical and turf challenges, we are trying to get our IT groups on campus (and even the different groups in our central IT organization) to understand that we are all on the same team. We are explaining to vendors the importance of the middle-ware environment that we are putting in place. Their applications need to work with our directory services and our security schema and need to integrate with our Web portal. We are doing this work as we continue to roll out new features in our portal and as we prepare to roll out the faculty-staff version. Finally, we have not begun to address the issues surrounding prospective students, alumni, parents, vendors, trustees, friends of the university, and the like. How big will this bloody portal get? How big should it get? Right now, it feels bigger than a herd of elephants.

We have learned key lessons in several areas:

- **Project management.** Implementing a portal requires strong project management from the get-go. The primary jobs of the portal team are to adapt the portal to the campus, be sure it works, and then do the core work of system integration. But there are others involved: the directory team, the security team, the student services team, the e-business team, the campus Web presence team, the network folks, the e-mail folks, the calendar folks, the library IT team, the learning technology folks, the operations folks, and all of

the teams on enterprise systems that serve the administrative needs of the campus community, as well as researchers and their computing requirements. Somebody has to think across all of these units and coordinate their efforts regarding the portal.

- **Test environment.** In implementing a system for 6,000 students, a campus can continue to use the technology environment for testing. This won’t work when the community is larger than 40,000. A solid test environment really matters.
- **Contingency plans.** Some pieces are harder than others to bring live. When a campus plans to go live with big aspects, such as Web course enrollment, it must be careful to work with the campus community so that a backup is in place, and it should also be careful to specify flexible dates (such as “during the spring semester” instead of “January 1”).
- **Architecture changes.** This is still the cutting edge. While implementing important features, a campus also makes architectural decisions that will require retrofitting those features. For example, our most recent decision is to incorporate Web-ISO (Initial Sign On)—a decision we weren’t ready to make a year ago. We have found it necessary to live with moving targets.

Will portals open the door to the lady or the tiger? The answer is both. You can’t open one door without opening the other. Portals can change the face of the campus for its constituencies. Portals can offer a much more user-friendly technology environment. And like the lady waiting to serve, they can create a friendlier environment overall. But this is hard work. It feels like the bleeding edge. That damn tiger takes another bite out of us every time we tackle the next big piece of the project. We need to keep the antiseptic and the bandages handy for a long time. Is the portal worth the risk and the pain of all those bites? Absolutely.

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