QUESTIONS AND ANSWERS ABOUT ACADEMIC UNITS AND UW’S IT REVIEW PROCESS

Why is the administration considering more central management of IT? Some historical context is useful here. As a result of strategic decisions made centrally in the early 1990s, UW’s management of IT is now highly decentralized, except for administrative computing. Those decisions, nearly two decades old, helped moderate the budget pressures associated with that era’s new instructional technologies. And the decisions arguably reflected an intellectual vision that UW’s presence in computationally oriented research would remain idiosyncratic and limited to a small segment of the faculty.

Instructional trends in many disciplines, together with a decade’s worth of academic planning, have changed that vision fundamentally. Disciplines ranging from the physical and life sciences to engineering to economics and other social sciences now employ computational tools in their teaching, sometimes at a level of sophistication imagined only by a few faculty members in the early 1990s. UW’s complement of computationally oriented faculty researchers has grown by a factor of five, and it now spans some disciplines that once shunned computation. The institution enjoys a new, state-supported supercomputing partnership with the National Center for Atmospheric Research and has proposed an institution-level expansion of research computing power through the latest NSF EPSCoR proposal. The effects of these initiatives on our institutional culture and hiring strategies will only intensify these trends.

Several current vice presidents — including Robert Aylward, Bill Gern, and me, believe that the configuration inherited from the early 1990s has left UW inadequately positioned for its future in instructional and research-based computing. Because teaching and research lie at the core of UW’s mission, the Division of Information Technology must start to contribute more effectively to these activities, and that division’s leaders are eager to do so.

We recognize that the transition will require the Division of Information Technology to develop an unprecedented level of sensitivity to the needs of academics. At the same time, it will require academics to be forthright about these needs and honestly to evaluate possible management structures and configurations of employees that differ markedly from those to which we have all grown accustomed.

Are there really any problems with decentralized IT staffing? Under the current system, many units that employ their own IT-related staff have a small number of such employees — in some cases just one. These configurations leave units vulnerable when employees resign and even when they take vacation or sick leave. In contrast with these areas, where some additional redundancy would be helpful, in many other areas UW has unnecessary redundancy in personnel, equipment, and services — redundancy that the institution can ill afford. Finally, under highly decentralized IT staffing, the Division of Information Technology has little capacity to help build the community of expertise and opportunities for ongoing professional development that, for example, faculty members enjoy.

Won’t a more central approach reduce researchers’ flexibility? It shouldn’t. Administrators in the Offices of Academic Affairs, Research and Economic Development, and Information Technology recognize that flexibility in architecture, operating systems, software, peripherals, and staffing expertise is essential to high-level computational research. Any research effort, whether supported centrally or not, has to balance flexibility in these arenas with other needs, such as security, adequate environmental controls, and appropriate levels of interoperability. Central support can create new options for striking this balance. In implementing this strategy, the Division of IT recognizes the need to avoid a one-size-fits-all approach. At the same time, researchers have to be forthcoming about their real needs.
Will the IT reviews planned or under way result in people’s being laid off? No.

Does the fact that a position is part of the review mean that it can move to the Division of Information Technology? Some positions could become IT positions but still need to stay right where they are, for good reasons. Managers and administrators at all levels have a responsibility to identify these positions honestly and to make the reasons clear. Trying to “protect” positions by placing them “off limits” to review does little except leave important questions unanswered — a posture that is hard to square with a truly academic culture.

For this reason, it is inappropriate to remove, a priori, some of a unit’s IT-related positions from the scope of the review. Doing so is effective only at guaranteeing that the conclusions of the review will rest on an incomplete picture of the unit’s overall IT needs.

Why are faculty and academic professional positions part of the review? It is essential not to ignore any system design, programming, maintenance, or administration duties that faculty members and academic professionals (APs) contribute. In many instances these contributions are appropriate for the types of job descriptions and performance expectations that the affected faculty members and APs have. In some cases, though, inadequate IT staffing has led faculty members and APs, including postdocs, to take on work that diverts them from activities that are essential to their professional advancement. There are several ways to correct this problem. However, in no case will the Division of Information Technology take over the professional review processes or resources associated with faculty or AP positions, all of which will remain in the Division of Academic Affairs.

As has been the case for over a decade, it is possible to reallocate resources associated with vacated faculty and AP positions to other types of positions. And it’s possible for the review to yield a recommendation that an AP position be reclassified. Any reallocation will be subject to the usual CPM process, in which proposals and rationales from affected deans and department heads play a fundamental role. And a necessary condition for any mid-contract reclassification will be the agreement of the affected AP.

Why are grant- and contract-funded positions part of the review? The reasons are similar to those for faculty and academic professional positions: it is impossible to understand a unit’s total IT staffing needs without understanding how much of the burden contracts and grants — including contractual arrangements with state agencies — are bearing. There is no intent to transfer control of grant budgets to the Division of IT or to interfere with the work plans crafted by principal investigators. And all three vice presidents interested in research computing — Robert Aylward, Bill Gern, and I — have a strong interest in promoting, not hindering, computational research at UW.

One long-range outcome of the IT review may be to provide more centrally funded support for external awards involving computational research. Researchers and their department heads and deans can help steer this outcome in their favor by providing guidance during the review process.

The broader picture. Greater commitment to research-oriented computing by the central administration has already laid the groundwork for an improvement in UW’s research cyberinfrastructure by orders of magnitude. The NCAR-Wyoming Supercomputer Center slated for construction in Cheyenne is one example. Another is the budget for the EPSCoR Research Infrastructure Initiative proposal currently under review at the NSF. That budget includes a large, community-serving computer and mass storage system, to be housed in the new IT building. This system will serve researchers from across the university. This new cyberinfrastructure has the potential to provide computational capacity far greater than what is available in existing clusters.

Having invested in these improvements, UW now needs to re-examine the decentralized structures that it has inherited from the 1990s. I urge all academic units with an interest in computation to approach this process with the thoroughness and thoughtfulness that it deserves.

1 Additional information about the review process appears on WyoWeb, under the group IT Consolidation.