

Minutes*

Senate Committee on Finance and Planning
Tuesday, January 21, 1996
3:15 - 5:00
Room 238 Morrill Hall

Present: Charles Speaks (chair pro tem), David Hamilton, Gerald Klement, Gary Malzer, Patricia Ferrieri, Catherine French, Peter Robinson, James VanAlstine

Absent: Fred Morrison, Bruce Bromberek, Thora Carlidge, Jason Frick, Robert Kvavik, Richard Pfutzenreuter, Benjamin Senauer, Craig Swan,

Guests: Associate Vice President Donald Riley

[In these minutes: technology plans and administrative computing systems improvements]

Professor Speaks convened the meeting at 3:20, explained that Professor Morrison was recovering from the flu, and turned to Dr. Riley to lead a discussion of efforts to improve technology in various administrative areas.

Dr. Riley told the Committee that he would present what he had presented to the Board of Regents in January; he emphasized that his original focus was to be on the use and application of technology in teaching and learning, but that interest was diverted to efforts to improve administrative systems. He noted that the focus has been on the large systems (e.g., in human resources, grants management, student systems, and so on), but that it was important not to lose sight of what the University is doing in teaching and learning--which is, he pointed out, the mission of the institution.

Dr. Riley then reviewed with the Committee a large set of slides on information technology. Some of the highlights of that presentation were:

- The University is in the information industry, and its core missions (or "businesses") are research and discovery, teaching and learning, and outreach and service. The enabling infrastructure to carry out these missions are physical as well as information systems, technology, and resources.
- The impact of technology investments reach to: the management processes of education, research and outreach; to the student experience; to faculty productivity and experience; to staff productivity and business process improvements; and to cost effectiveness and "cycle time reductions."
- The University's technology plans in the 1998-99 fiscal year include technology across the curriculum, education for a lifetime, and Access 2000. The latter includes all the elements necessary to make the previous two items work--networks, communications, desktop computers,

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etc. This includes faculty development, without which the effort will not pay off.

Dr. Riley explained that employers are telling the University that graduates must have computer skills, no matter who they--employers--are hiring, and that the University must train students in those skills. The University must define what that training should be, and what experiences students should have in the classroom. What this will consist of will have to come from curriculum committees. Technology across the curriculum also includes technology-assisted education (instructional design and delivery, a modern learning environment, and effective learning strategies), so seeks to address better in-classroom education, with more self-paced learning.

Asked about what could be done for faculty who are not computer-literate, who do not want to be, but who want to take advantage of the opportunities, Dr. Riley said those are incompatible objectives. The University will provide support for faculty, but they must want to learn; if not, the University will wait until they retire. One cannot force faculty to use information technology, the University will not say they must do so, but those who do not wish to do so cannot slow the rest of the faculty down, and opportunities for learning will be provided.

At the same time, the University needs to "raise the bar" for what it expects of students coming out of the K-12 system.

Education for a lifetime is intended to offer training to people who, on average, will change careers 5-6 times during their working life; the expectation is that students will be able to come TO THE UNIVERSITY to obtain that training, rather than going elsewhere.

- Access 2000 has as its objective that students will have the tools and support necessary to receive maximum benefits from technology; this includes personal computers for all students, the needed communications infrastructure, systems and information resources, and faculty development and support (essential if there is to be any impact in the classroom).

Asked if there has been any change in freshman computer literacy, Dr. Riley said the evidence is anecdotal but that there appears to have been more training, over 50% of students have a personal computer at home and more have modems. Some institutions are requiring use of a PC, and so are some K-12 systems; if students come from a PC environment, they will expect it at the University. It may be, said one Committee member, that THEY will be "raising the bar" for the University. Dr. Riley agreed, and said that with the number of students who consider themselves to live on campus (i.e., within five miles), labs may not fit what they need.

Dr. Riley then took up the issues of "Administrative Process Redesign," the large-scale changes in technology in administrative services. He noted that the University has committed to replacing, or significantly improving, nearly all of its central administrative systems over the next four years. The projects currently under way include the Student 2000 System (replacement), the Human Resource Management System (replacement), an enhanced Grants Management System, improvement in the Financial Management system, and actions to ensure his office can provide the support necessary. He noted that the "year 2000" problem has been fixed in one system, and expressed confidence it could be fixed in the others in the very near future.

One Committee member, recalling Lewis Thomas, noted that solutions are cheap once they are found (e.g., the polio vaccine, once discovered, was much cheaper than antecedent treatments); will this be true of technology as well? Right now technology costs a lot, and there are a lot of people needed; will all these projects, being worked on at the same time, lead to a point where there will be savings in money and time? Another Committee member pointed out that the University is in a period of transition, analogous to the change from the horse and buggy to the automobile; for a time, society needed people who could work with both. That is now true for technology. Dr. Riley said that if the University does not change the way it does things, the costs will increase; it must take time and people out of the processes from which there is no value added, so that funds are not pulled away to bureaucratic functions, and it must leverage its resources to support the core missions. How does one get a return on the investment? By changing the way it does things, such as using the web.

This last point engendered conversation about the apparent contradiction between increasing use of electronic communication and the University's plan to charge for modem use. Dr. Riley pointed out that he had opposed charging, that he never thought it was the right idea, but that no one has identified a solution for the funding problem the University faces.

Why must the University replace its administrative systems? Existing systems will fail due to Year 2000 problems (which are being fixed). The alternative is to spent \$15 million on Year 2000 fixes with no added value and same processes and problems. CUFS will be fixed, Dr. Riley said, because the University cannot afford to replace everything, and modules can be added so that it performs as needed. New systems will support new processes and enhanced productivity, allow a self-service model, support planning, performance, and marketing, and better support students and faculty.

The goals of administrative process redesign include simplification of policies and procedures, application of best practices, streamlining underlying workflows, reduction in support staff needs, reduction in cycle times, provision of one-stop and seamless service, user-friendly support and service, a performance-oriented approach to program and service delivery, and increased administrative accountability--at all levels. The old process had little in the way of self-service and a large cadre of specialists; the new will have much more self-service and far fewer specialists.

The timelines for these projects is as follows. Grants Management is to be completed by the end of 1997; the Year 2000 problems will be fixed by the end of 1997 so a CUFS replacement can be phased in beginning in 1998; the new student system modules will be completed in the Fall of 1998, and the new human resources modules will be phased in beginning in Fall of 1998; the payroll system will be replaced by 1999.

The risks related to the these administrative system projects are several. Many target dates are immovable; new technology is still evolving; the first PeopleSoft (the vendor chosen by the University for human resources and student systems) student system will be released in Fall, 1997; technical staff will experience a learning curve; there are no contingency plans because there is no turning back and there cannot be failure; projects may have conflicting critical priorities in terms of time and money, which will need to be balanced; project budgets and milestones must be detailed, because at this point some are only guesses. The availability and timing of resources is unknown at this time, the University's technical expertise--its staff--is in high demand in the economy, the department training issues are immense, and the changes will also require modification of academic and financial policies (e.g., the number of

calendars and grading systems).

There are other risks as well. The Year 2000 problem apply to departmental as well as University systems; network security issues need to be addressed, and there is great competition for University staff. In terms of the change to semesters, Dr. Riley explained, some system changes must be in place before the conversion, and so are tied to the change, but the linkage is not made explicit.

There will be efforts to minimize the risks. One major one is to ensure integrated project management; his office has formed a senior level project management team (the Enterprise Applications Integration Team, or EAIT) that will review all projects, across boundaries, in terms of time and money. One Committee member who has long been involved in these kinds of efforts commended the appointed of the EAIT as "spectacular" but expressed worry that departments and colleges might break out of the plans and go their own way, doing things that do not fit into the University systems. That would be very expensive. Another Committee member pointed out that such integration and coordination runs contrary to the entire history of the University (!), but wished Dr. Riley well in his plans.

Professor Speaks passed the gavel to Professor Hamilton.

Committee members then discussed with Dr. Riley, among other things, what would be done if the legislature does not provide the necessary funding, the extent to which the projects would include, where appropriate, desktops and PCs for faculty; long-term maintenance costs for the systems; decision criteria for selecting a vendor, and the (lack of) wisdom in explicitly exempting the Law School and Medical School from a common calendar. Dr. Riley noted the relationship between the biweekly payroll decision and grants management as an example of a decision that has a price that can be quantified; each decision has a price that needs to be put in the context of a complex system and the costs identified. EAIT will start to study the impacts of decisions so they can be openly discussed (such as keeping multiple calendars).

Hearing no more discussion, Professor Hamilton adjourned the meeting at 4:45.

-- Gary Engstrand

University of Minnesota