

TECHNOLOGY COMMITTEE JUNE 22, 2011 8:30 A.M.

> BOARD ROOM Wells Fargo Place 30 7th Street East Saint Paul, MN

Please note: Committee/Board meeting times are tentative. Committee/Board meetings may begin up to 45 minutes earlier than the times listed below if the previous committee meeting concludes its business before the end of its allotted time slot.

Committee Chair David Paskach calls the meeting to order.

(1) Minutes of May 18, 2011 (pp. 1-5)

- (2) Information Technology Update
- (3) Information Security Program Review (pp. 6-13)
- (4) 2011 Office of the Chancellor Performance Report- Technology Division (pp.14-23)
- (5) Students First Report (pp. 24-25)
- (6) Technology Committee Goals (pp. 26)
- (7) Technology Committee Goal Service Delivery Strategy (pp. 27-40)

<u>Members</u> David Paskach, Chair Christopher Frederick, Vice Chair Cheryl Dickson Jacob Englund Phil Krinkie James Van Houten Michael Vekich

Bolded items indicate action required.

MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES TECHNOLOGY COMMITTEE MEETING MINUTES May 18, 2011

Technology Committee Members Present: David Paskach, Chair, Christopher Frederick, Vice Chair; Trustees Cheryl Dickson, Jacob Englund, Philip Krinkie, James Van Houten and Michael Vekich

Technology Committee Members Absent:

Other Board Members Present: *Scott Thiss, Board Chair, Chancellor James McCormick, Alfredo Oliveira, and Gail Olson,*

Leadership Council Committee Members Present: Vice Chancellor Darrel Huish and President Judith Ramaley

The Minnesota State Colleges and Universities Technology Committee held its meeting on May 18, 2011, at Wells Fargo Place, 4th Floor, Board Room, 30 East 7th Street in St. Paul. Chair David Paskach called the meeting to order at 9:32 a.m.

1. Minutes of April 19, 2011Technology Committee

The minutes of April 19, 2011 were approved as written.

2. Information Technology Update

Vice Chancellor Huish reported that the Information Technology staff continues to conduct campus visits. There are two types of visits. The first brings technology teams to the meet with service professionals on a campus to solicit suggestions and observations about which business process automations are working and which need improvement. The other type of meeting is a personal Vice Chancellor campus visit, structured by the campus.

Vice Chancellor Huish provided an update on state government issues that may have impacts on the System. The Statewide Information Technology (IT) consolidation bill would move responsibility for IT related staff from their respective agencies to the Office of Enterprise Technology (OET) and charge OET with generating savings. This does not include our system; however it could result in changing some of the services provided by OET. Some, conversations are taking place that explore the extent of which IT services are considered essential in the event of a state government shutdown. Contingency planning focuses on raising awareness that the system helps maintain data networks that police and fire services rely upon.

Technology had begun two important job searches. The first is for a new Associate Vice Chancellor. This position is a result of Carolyn Parnell's departure. The second is for a Chief Information Security Officer; this position will become available with Bev's Schuft's retirement in June.

Trustee Van Houten requested more information on the role of the Chief Information Security Officer and how it will interact and coordinate with the audit plan. Vice Chancellor Huish responded that the role existed, but was renamed to more effectively describe the scope of the position.

Trustee Van Houten requested more information on the coordination of security with audit. Chair Paskach responded that as a result of the discussion during the audit committee meeting a security program update would take place in June.

Vice Chancellor Huish provided information on the three committee goals. The technology division completed their response to the Office of Legislative Auditor report. An update on the second goal, Student's First will take place later in this meeting. Information on the third goal the Service Delivery Strategy will be presented later in this meeting.

3. Report on ITS Annual Conference

Vice Chancellor Huish provided a report on the annual ITS Conference. The ITS conference was a great success. More than three hundred technology staff members attended the conference. Over seventy breakout sessions were conducted by staff subject area experts. Information provided by vendors was structured specifically with the system in mind. During informal times, the attendees had opportunities to share best practices and build connections with peers.

This conference is self-organized and administrated. A few higher education technology representatives from private colleges attended the conference to learn how it was organized, so that they may emulate or participate in future IT conferences.

Outstanding achievement awards were presented at the conference. The criteria for this award included: technology involvement at a system wide level; going beyond expected boundaries of service; technology that brings unique efficiencies and recognition to those who improved professional skills in areas out of their comfort zone.

Twenty-five nominations were submitted. Two projects received the Outstanding Achievement Award at the conference. The Winona State University Mobile project is an application for the iPad and iPod touch. It includes a campus map, calendar, virtual tour and bus tracking system that uses global positioning system technology. Alexandria Technical and Community College developed an interactive customer relationship management system. This application pulls tables from the Integrated Statewide Records System (ISRS) in real time. Staff use this to view student records and add notes during interactions with students. This is a pilot project but offers groundbreaking use of ISRS data.

Trustee Englund inquired if other divisions have conferences like this and if collaboration tools were available so that divisions could share ideas internally. Vice Chancellor Huish stated that other divisions hold similar training and collaboration events. The system is always mindful of using the tools available to increase collaboration and communication. This may include wikis, interactive video or WebEx.

4. Students First Report

Vice Chancellor Huish introduced Jonathan Eichten, the Director of Students First and Pat Carmody, Registrar from Southwest Minnesota State University. Pat Carmody will share information on how the waitlist has enabled universities and colleges to be more efficient at managing courses offered by improving enrollment management practices.

Pat Carmody stated that her attendance is a result of one of the campus visits. During the meeting, users asked for some improvements to the waitlist application. The waitlist was created with the intention of filling classrooms. Southwest Minnesota State University saw this as a way to meet students' demand for courses. The tool was used to develop a process of holding and releasing course sections as they filled. The process was piloted in November for the spring semester of 2010 with high demand courses. The pilot was successful and the process was implemented for the summer and fall registrations with every course offered.

By implementing this process, Southwest Minnesota State University is providing better service and meeting students' needs.

Chancellor McCormick thanked Pat Carmody for providing the campuses users experience and inquired if it assists in filling empty seats. Pat Carmody confirmed that the process allows the campus to fill a class before offering a new section.

Trustee Van Houten inquired if this was something that would meet the definition of cloud computing. At the Seventh Annual Audit Committee Conference issues with cloud computing were highlighted as a topic. Vice Chancellor Huish responded that campuses may see Students First as a form of cloud computing, because the campuses connect to databases outside their campus. Using outside sources as the custodians data will create risks. On the other hand, due to provider's scale they may have more resources and expertise available to address issues. The system is developing careful contracts and service level agreements to address these issues.

Jonathan Eichten, Director of Students first provided an update on each of the Students First projects. The Single Search project is on schedule. While at Southeast Technical College, an admissions director expressed excitement about sharing this application with the counselors at the local high schools. This application will change how students move from high school to college.

Single Application project is on schedule. This application will allow the students to apply to multiple institutions and allow the students to transfer their core data to another institution as needed. The admission directors are excited about this application.

The Graduation Planner project is in the testing phase. Minnesota State University, Mankato and North Hennepin Community College are testing the system and building roadmaps. The software that completes the integration into e-services is not available yet. The goal is to validate the software components in July.

The Single Registration project is on schedule. The team is working on changes that support system policies on issues for students who have holds from other institutions in the system.

The Single Bill / Single Payment functionality is developing faster than expected. Winona State University has joined Alexandria Technical College in piloting this application. This will roll out system wide by August.

The Communications Module has been implemented with the admissions process; it now includes an automation to email. Eventually functionality will include text messaging and other areas like financial aid.

The Student Loans Acceptance and Certification application has been rolled out to eight campuses and will be released to all campuses in June.

Trustee Dickson commented that it is important that the system gets the information out on the Single Search out to the high schools as soon as possible. The sooner students begin looking and thinking about college the better. It wasn't that long ago that the trustees heard about Students First. It is exiting to hear about all of the projects that will be rolling out soon. Congratulations and thank you to everyone involved in Students First.

Chair Paskach inquired what the response to a request for a change is. Jonathan Eichten replied that the team keeps track of the ideas and requests for changes. The roll out of projects is just the beginning; all projects have tails or changes.

Trustee Oliveira stated that the waitlist tool is one of the best tools for students. It would help if the waitlist application were changed to include the number of students needed on the wait list before a new section could be added.

Trustee Krinkie stated that during the audit meeting on Tuesday concerns about inconsistencies in student data were discussed and inquired how this is resolved. Vice Chancellor Huish responded that a general answer is that the system has multiple sources of data. Students can neglect to point out that they attended or applied to other institutions within the system, these results in duplicate student records. Resolving the records takes a considerable amount of work. More information on the issue can be gathered and presented in the future.

5. Service Delivery Strategy

Vice Chancellor Huish reminded the Trustees that the Service Delivery Strategy was presented at the April meeting. Chief Information Officers (CIO) Ken Ries, from Pine Technical College, and Chris McCoy from Metropolitan State University are here to assist in the continued discussion of the Service Delivery Strategy.

Vice Chancellor Huish provided a brief overview of the Service Delivery Strategy. The key element of this strategy is intentionality, which will be used to decide where services will be placed and how they will be delivered. The existing Information Technology governance structure will be used to make decisions.

Chair Paskach requested that President Ramaley provide the presidents perspective. President Ramaley responded that this document was developed collaboratively. The presidents are pleased with the clarity of the document and support it.

Trustee Van Houten requested clarification on the chart. Does it depict where the system is today and how does it relate to the investment in technology. Vice Chancellor Huish stated that the chart is a general depiction of how things are today.

This chart generates conversations about what items should be considered for a change in investment or placement.

Trustee Dickson inquired if the chart investment includes the system and institutions. Vice Chancellor Huish stated that this is a generalized depiction of the collective investment in an area.

Chair Paskach inquired what the timeline was to develop the Information Technology Strategic Plan. Vice Chancellor Huish stated that the Service Delivery Strategy would become a project. Many of the objectives listed in the plan are in motion. The plan is dependent on the initiatives that will continue and those that the new chancellor implements. One could expect to see a plan by the spring of next year.

Chair Paskach requested that the CIOs provide their perspective on the Service Delivery Strategy. Chris McCoy stated the process used to develop this document was one of remarkable collaboration. This will allow the CIOs to survey system wide services; to determine when to engage with other institutions; and where to leverage efforts to accomplish common goals.

Chair Paskach there is a lot of momentum in the system and technology; conceptually this is very strong. There is intentionality in decision making, while still letting the campus innovate to find solutions.

Ken Ries stated that this is a tremendous opportunity to move the system forward. For the smaller institutions this strategy will be an important tool allowing them to locate opportunities for innovation and collaboration. The CIO community has embraced this process.

Trustee Van Houten inquired what technology would be considered essential and are there things that could be put off until tomorrow. Vice Chancellor Huish responded that Technology should not be done for the sake of IT. Instead, changes in technology should be done in alignment with the other business units work plans.

Trustee Dickson stated that the strategic plan needs to include a statement on the must describe the nature of technology. The newer the students the more technology becomes an essential service. As a part of the strategic plan, technology should work with others in state government to define essential technology components. This information can be used to help educate the legislatures and the public the essential aspects of technology. President Ramaley replied that that the system needs to approach this issue as an investment in technology will mean the difference between surviving today as opposed to thriving tomorrow.

Chair Paskach adjourned the Technology Committee meeting at 11:03 a.m.

Respectfully submitted, Christine Benner

MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES

Agenda Item Summary Sheet

Com	mittee:	Technolo	ogy Co	ommittee		Date of Meetin	ıg:	June 22, 2011
Ager	nda Itema	: Informati	ion Se	ecurity Program	Revie	W		
	Proposed Policy C	d 'hange		Approvals Required by Policy		Other Approvals		Monitoring
x	Informat	tion						

Cite policy requirement, or explain why item is on the Board agenda:

This report will provide the Trustees with information about the security program.

Scheduled Presenter(s):

John Hoffoss, Information Security Specialist

Outline of Key Points/Policy Issues:

Background Information:

The Board of Trustees requested a security program update at the May meeting.

BOARD OF TRUSTEES MINNESOTA STATE COLLEGES AND UNIVERSITIES

INFORMATION ITEM

Information Security Program Review

BACKGROUND

During the May Board meeting, Trustees asked several questions about the systems security program. John Hoffoss will present the following Security Program Review.



















	Security Lifecycle
SAMAT OPPLATES	Application Security Program
	 Driven by Software Security Task Force
	 Secure Software Development Standards, Training and Tools
	 Software & Hardware Security
	 Vulnerability and Patch Management
	 – Secure File Transfer
	Incident Response
	 Support campus staff in resolving viruses,
	breaches, and other activities that derail operations
Slide 10	





MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES

Agenda Item Summary Sheet



Cite policy requirement, or explain why item is on the Board agenda:

The Board of Trustees requested that this report be developed and presented annually in each of the Board's committees

Scheduled Presenter(s):

Darrel Huish, Vice Chancellor and Chief Information Officer

Outline of Key Points/Policy Issues:

The performance report includes four sections that provide information about the current and projected budget of the division; the functions performed by the division and how they differ or complement those of the institutions; a listing of major goals and accomplishments for FY 11and preliminary division goals for FY 12.

Background Information:

This report is part of a larger report on the performance of the Office of the Chancellor for FY 2011. It was developed in response to the Office of Legislative Audit recommendation in the 2010 Office of the Chancellor Evaluation that suggested greater Board oversight of the office.

This is the second annual report in this format; the first report was presented in June 2010

I. Multi-year Financial and Personnel Data

	2010-11	Biennium	2012-13	Biennium
Cost Category / Financing	2010 Actual	2011	2012	2013
		Estimate	Projected	Projected
Salaries & Benefits	\$17,264,576	\$18,096,760	\$18,054,726	\$18,054,726
Consulting Contracts	3,248,269	3,724,247	2,702,000	2,702,000
Other Administrative Costs	17,246,634	15,049,851	17,400,900	17,400,900
Total Administrative Costs	\$37,759,479	\$36,870,858	\$38,157,626	\$38,157,626
Less: External Funding (1)	(4,800,000)	(4,800,000)	(4,115,000)	(4,115,000)
General Fund Financed Costs	\$32,959,479	\$32,070,858	\$34,075,626	\$34,075,626
Distribution of General Fund Activities				
Direct Services to Colleges/Universities	\$31,700,218	\$31,151,874		
Systemwide Services	1,259,260	918,984		
Division Employee FTE (2)	170.07	170.72	174.0	174.0

(1) Learning Network of MN funds administered 100% to partner groups

(2) Information Technology Division had 191.5 authorized FTE's at the beginning of FY 2011. Authorized FTE count was reduced during the fiscal year to 174.

II. Explain the structural distribution between the functional duties performed by this division and similar activities performed by the colleges and universities.

ITS is, in essence, a shared service for the colleges and universities. Collectively we share a single enterprise administration system, a single elearning system, a single hardware infrastructure on which the systems operate and a single Wide Area Network to access the systems and provide Internet to students and faculty. We also share a single security program and a single warehouse of information for their use. Colleges and universities do not perform these functions. Instead, the college and university role is to populate the systems with college specific data or instructional content.

ITS functions that are not shared services to campuses use a very small percent of IT resources. The Office of the Chancellor specific functions are desktop support, email, telephone support and webmaster services. Each campus also has IT staff and uses resources to provide desktop support, email, telephone and webmaster services and local infrastructure at the campus level. Since the campuses do not need to operate individual enterprise administration, eLearning, Wide Area Network, enterprise servers, information warehouse and security programs, their efforts are directed to these unique, campus specific needs. Some institutions also support small development staff groups to extend the shared enterprise administration system to meet campus needs for specific functionality.

III. Cite any recent or planned redistribution of costs or personnel between this division and colleges/universities for this functional area.

There are no plans to redistribute costs to the colleges/universities for IT support functions. Please note there are several discussions that may lead to even more IT related shared services. The end result of the discussion may be redistribution of campus functions and costs. For example, campus IT staff would like to explore whether their own data backups could be more cost effectively handled as a shared service. Another example is an emerging discussion about providing email as a shared service.

IV. Cite performance metrics and major accomplishments from the past year (tie to prior year division/committee work plan, if possible).

Students First

Provide Students First functionality for faculty to enter grades in "real-time" so that students will be able to see grades sooner and complete activities that are dependent upon a satisfactory grade.

Provide Students First functionality for faculty to enter last date of attendance (LDA) at the time of grade entry.

Provide Students First functionality for a student to search for courses at other Minnesota State Colleges and Universities that are equivalent to a course at their home institution. This functionality is provided as part of the web based course search and registration application. The equivalency of a course is determined based on data within the DARS system.

As requested by Students First, automated the paper-based, labor intensive process campuses used for students to accept federal direct loans.

Automated the tedious and lengthy campus loan certification process. This Students First system will result in a dramatic reduction in the need for manual data entry by campus financial aid staff, as well as quicker delivery of funds to students.

Completed and deployed for pilot a new Students First ePayment application. The new functionality supports payment to multiple institutions with a single credit card or eCheck transaction.

Launched a new Students First communications module to allow marketing, admissions and registration offices the ability to create re-usable messages, identify the type of recipient for the messages, and schedule the messages to generate letters that can be mailed to the recipients.

Developed and released a new Students First eApplication system.

Data Center

This year technology had successful semester startups; better than any two startup in operational history.

Improvements to the Integrated Statewide Records System (ISRS) include the development and implementation of a Performance Testing /Quality Assurance Database refresh process with full integrity checks.

Major data security improvements in ISRS web application were achieved when the ISRS staff began using Identity and Access Management authentication to access Financial and Security web applications.

Significant improvements in the development process have been achieved by separating the ISRS development environment from the production environment.

Completion of Unix / Oracle Input/output performance tuning.

A major expansion of the test lab was completed; this will be used to test technology prior to implementation. The lab emulates two data centers and one standard campus.

While working in the systems testing environment the technology team identified bugs in Solaris/Oracle. As a result, patches and upgrades have been developed that are used across the world.

Completion of Oracle 10.2.0.5 upgrade resulted in security, stability, backup and recovery improvements. The technology staff is working on planning, testing and partial completion of the Oracle 11g upgrade.

The roll out of eFolio 2.0 is complete; this uses a simplified architecture from past versions and will improve the user experience.

Two new applications were developed: Program Navigator and a content and document management system called Legal Files.

A complete redesign of the West Bank Office Building / Data Center Upgrading and reconfiguring the network infrastructure (e.g. switches, wiring, fiber connects) brings the wiring infrastructure into compliance.

Wide Area Network (WAN) redundancy project is complete. The result is significant improvements including redundancy and increased bandwidth across the entire system. Should the network, that most of our students use, experience a failure like a fiber cut or circuit failure the students would not experience an interruption in service.

Implementation of vulnerability scanning and event logging has resulted in identifying roughly a billion events per day

Enterprise – Storage and VMS System Mangers

Continued work on the Data Center II project, which includes upgrades to infrastructure and redundancy between enterprise data centers.

Upgraded Tape Drives and implemented encryption process for secure offsite back up tape storage.

Enterprise – Network Operations Center Staff

Work with the University of Minnesota to increase physical security at the data center: access to the data center now requires a fingerprint and a U of M Picture ID.

Continued support for ongoing operations and backup for the Tier 1 help desk staff.

LAN/Desktop Support

Provided technical support to the Quarry Center and Granite Falls offices to conduct staff moves. This group continues to provide technical support for staff movies.

Implementation and improvements to wireless technology at the Office of the Chancellor and two other locations.

Significant virtualization of the Office of the Chancellor server environment resulting in cost savings, increased redundancy and availability of services.

Completed installation of the Virtual Desktop Interface in the Training Center. The result is cost savings, easier patch management and allows select staff to securely connect to their desktops from remote locations.

Installation and implementation of follow you printing (Equitract) project for the Facilities unit to reduce printing costs.

Installation of Active Directory and Windows print servers in preparation for Novell to Microsoft conversion.

Completed the Internet Protocol Telephone project for all Office of the Chancellor staff, including remote sites. Resulting in system office costs savings and increased functionality.

Completed Citrix server upgrade which allows remote secure access and will be used for telecommuting.

Security

PCI (Credit Card Data Security)

Established a system wide contract to provide cost-effective service for participating institutions in order to assist campuses to meet the requirement to scan networks quarterly. Developed PCI handbooks for institutions as a helpful guide to address requirements. The Office of the Chancellor IT security staff continues to provide PCI consulting for institutions.

Application Security

Procured a service provider, Veracode, for code and web based scanning of selected enterprise applications. Through the Enterprise Application Security Program the security team continued work in partnership with enterprise application development and architecture staff to advance secure development processes and practices. Through the Campus Application Security Programs provided campus visits to evaluate current application security programs and practices, advise and assist in establishing or advancing institution application security programs and promote secure coding practices. Held a two day Secure Application Coding Course for campus and enterprise development staff.

Provided a process framework for identification, assessment and impact of risk. Risk assessment conducted on Student Direct Deposit project.

Created a contract for secure file transfer services. This will enable staff and faculty to securely send and receive files within the systems and with third parties.

Created a contract for independent penetration testing of enterprise data center. This will examine computers and networked devices to identify and verify weaknesses in configuration and implementation.

Added two information security training courses: Threat Modeling & Fuzz Testing. The total number of courses available to campuses is eighteen.

Data backup guideline completed and posted to Board policies.

The three core security awareness courses have been refreshed with release anticipated this summer.

Implemented monthly vulnerability management reporting with reports sent out to all institution CIOs.

Established a master patch management contract, which allows institutions to purchase a costeffective patch management solution.

Worked with business analysts, developers and campus contacts to assist with rollout of the new security administration module.

Closed 14 audit findings.

Development

Completed a 20-month project to implement a federal program known as "Year Round Pell," and then deactivated the changes after Congress revoked the Year Round Pell program.

Completed the conversion of all schools to Direct Lending.

Created technology to allow recalculation of the State Grant for students to address a surplus in the Minnesota State Grant Award program.

Created a more secure and automated process for processing and transmitting private loan data.

Addressed audit findings and created a more cost effective solution to automate loan disbursement notification to students.

Significantly reduced the student frustration of delays and mistakes resulting from duplicate records by developing new automation and process tools.

Provided student advisors with access to a new, web based version of the Degree Audit so advisors can access the interactive reports for all their advisees via the faculty portion of the ISRS eServices portal.

Launched Vets, a first of its kind nationwide system providing veterans an automated tool to cross-walk military training and experience into actual credits.

Created technology to automate the admission to major/program process.

Developed automation needed to support Board of Trustees policy changes for visiting students.

Created a new registration edit to help colleges and universities control registration in courses based on Accuplacer test scores and pre-requisite courses.

Released a final version of a web based security administration module allowing campus users to request and manage security clearance for various applications and allowing campus administrators to review and recertify system approximately 100,000 approved security roles each year.

Virtually eliminated manual payroll processing on campus and at the OOC by automating the interface of payroll timesheets to MMB. All schools except Mankato will be using this new interface by June 30th, 2011. Mankato will join in August.

Enable all ISRS Administrative applications (e-timesheet, accounting, etc.) to use StarID as login credential.

Provide functionality for Colleges and Universities to enter additional information into Curriculum for course outlines and for students to retrieve a PDF of a course outline via the web.

Instructional Management System

Desire 2 Learn (D2L) the instructional management system had very good availability all year. Last summer, a change in the hardware and operating system used to support the instructional management system and changes to the database versions were completed. There were no performance issues and the strong internal monitoring prevented serious operational issues.

Realized a 10% to 15% growth in usage of the instructional management system this fiscal year.

Research and Data Warehouse

Completed extensive work on the Board of Trustees' Accountability Framework (Action Analytics) reports, including: Student Persistence, Student Enrollment, and Student Transfers between institutions.

In preparation for the Board of Trustees' Accountability Framework reports cited above, over 100,000 rows of student data with erroneous ethnic records were corrected. The correction process took over two months to complete.

To simplify work on the campuses designed specialized data tables to record the quarterly expenditure of federal economic stimulus funds available to MnSCU in FY2011. The expenditures, summarized by specialized reporting categories, were sent to the State of Minnesota Office of Management and Budget, and then forwarded to the federal government.

Developed a new report for MnSCU and the State of Wisconsin to record MnSCU students, their courses, and the amount of tuition paid by each student. The report is sent to Wisconsin, and is used to calculate the about of tuition owed by Wisconsin to MnSCU colleges to make up for the differences in reciprocity tuition rates between the states.

To aid the campus business offices, new banking reports were developed to help simplify the reconciliation of the MnSCU accounting system with the state treasury accounts and local banks. The design and approval of the reports was managed by the OOC Campus Assistance Unit along with input from the campuses.

Throughout the year, we offered 28 on-site data and report training sessions to 189 trainees. The average rating on a scale of 1 to 5 with 5 being "excellent", was 4.5. WebEx support sessions were also offered for one-on-one training and to campus groups. The training skill level ranges from beginners to advanced students. An estimated 50 total WebEx sessions were offered in FY2011.

To meet new federal reporting standards, the entire Carl Perkins grant datasets were redesigned and implemented. This affected all two-year MnSCU students.

During the year, about 40% of needed documentation was completed. Work has begun on a new data dictionary.

Learning Network

Established a process for consolidating and sharing infrastructure and management components of the six regional communications networks in order to reduce redundancies, increase standardization when desired, seek state-wide licensing and resulting savings, and collaborate on operations. These efforts will result in significant cost efficiencies across the six regions.

Completed the first year of a successful collaboration among the six communications regions involving the shared acquisition and use of a high definition codec.

Completed a streaming pilot study and moved the project into an RFP phase, with negotiations on the RFP currently in process. Upon completion of the RFP (expected by the EOY), the three partners supporting the streaming project—the University of Minnesota, the Minnesota State Colleges & Universities, and the six communications regions—will convene to address the future steps of the project.

 V. Identify major division/committee work plan activities planned for upcoming year. Advance the Service Delivery Strategy that was developed with input from several stakeholder groups throughout MnSCU and endorsed by the Trustees. Develop and implement a process to allocate scarce IT resources to advance the institution's agreed strategic priorities

Explore the possibility of a set of measurements to assess the quality of IT services at the various campuses

Complete the Students First Project initial rollout and build upon the success of Students First project by persistently facilitating adoption of these new services by colleges and universities.

Begin the conversion off of VMS. This effort will take two or three years and will include the planning, pilot and conversion.

Complete strategic ITS organization modifications and make effective hiring decisions with leadership vacancies.

Launch and complete a project to consolidate Tier 1 (first contact) help desk support.

Rollout and promote use of Identity and Access Management to move towards single (or at least fewer) sign-on.

Assist with the shared services concept throughout MnSCU.

Proactively respond to IT security issues, and in particular take action with PCI compliance.

Implement Microsoft Outlook/Exchange as a more compatible and interoperable productivity tool for Office of the Chancellor (replace GroupWise).

MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES

Agenda Item Summary Sheet

Con	mittee: Tech	nology (Committee	Date of Meet	ing:	June 22, 2011
Age	nda Item: Stud	ents Firs	t Report			
	Proposed Policy Change	,	Approvals Required by Policy	Other Approvals		Monitoring
x	Information					

Cite policy requirement, or explain why item is on the Board agenda:

The second goal implemented by the Technology Committee is that the Trustees will monitor progress on the Student First initiative.

Scheduled Presenter(s):

Jonathan Eichten, Students First Director

Outline of Key Points/Policy Issues:

Background Information:

Jonathan Eichten will provide a report on the Students First Initiative.

BOARD OF TRUSTEES MINNESOTA STATE COLLEGES AND UNIVERSITIES

INFORMATION ITEM

Technology: Students First Report

BACKGROUND

Jonathan Eichten, Students First Director will present a comprehensive report on Students First projects. Full project detail may be found on the Students First website: http://www.studentsfirst.project.mnscu.edu.

MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES

Agenda Item Summary Sheet



Cite policy requirement, or explain why item is on the Board agenda:

As part of its FY2011 work plan, the Technology Committee implemented three goals: Trustees
will deliver the progress of the Student First initiative; Trustees will deliver the technology
related activities that are in response to OLA audit and Trustees will sponsor the development of
a strategy for delivery of technology services. The Trustees will use this opportunity to review
these goals.

Scheduled Presenter(s):

Darrel Huish, Vice Chancellor and Chief Information Officer

Outline of Key Points/Policy Issues:

Background Information:

The goals were presented at the September 15, 2010 meeting.

MINNESOTA STATE COLLEGES AND UNIVERSITIES BOARD OF TRUSTEES

Agenda Item Summary Sheet



Cite policy requirement, or explain why item is on the Board agenda: The Technology Committee will discuss the goal to deliver the Service Delivery Strategy.

Scheduled Presenter(s): Darrel Huish, Vice Chancellor – Chief Information Officer

Outline of Key Points/Policy Issues:

Background Information:

On September 15, 2010, the Technology Committee adopted as one of its goals the development of the Information Technology Service Delivery Strategy.

BOARD OF TRUSTEES MINNESOTA STATE COLLEGES AND UNIVERSITIES

BOARD ACTION

TECHNOLOGY COMMITTEE GOAL - SERVICE DELIVERY STRATEGY

1 BACKGROUND

- 2 On September 15, 2010, the Technology Committee adopted as one of its goals for the year to
- 3 "sponsor the development of a strategy for delivery of technology services, so that these services
- 4 can be provided efficiently while also sustaining an institution's ability to innovate and
- 5 differentiate student and community services." Based on the information received by the
- 6 Committee the trustees will discuss completion of the goal.

7 8

9 **RECOMMENDED COMMITTEE MOTION**

- 10 The Technology Committee recognizes the completion of the Service Delivery Strategy goal.
- 11

12 RECOMMENDED BOARD MOTION

- 13
- 14 15

28

Service Delivery Strategy

Information Technology Date: April 6, 2011



Minnesota state colleges & universities

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Strategic Vision:

Minnesota State Colleges and Universities will be intentional as we position IT services to contribute to our strategic goals. This means that a finite set of specific IT services will be provided system-wide by a central service provider for the common good of all. Three current examples are the data communications network, the Instruction Management System (D2L), and the enterprise system of record for student and financial data (ISRS). It is expected that all campuses will utilize these centrally provided services and will not establish alternative local methods of providing them.

At the same time, we will be intentional in identifying IT services that campuses will deploy and support using their own unique methods and resources. Some current examples are business workflow automation, institutional and student E-mail, institutional web presence, printing services, and desktop computer workstations.

At any given time, there will be IT services that are at various stages of a bi-directional lifecycle of discussion, experimentation, local (pilot) implementation, service standardization & consolidation, system-wide centralized implementation, and ongoing operation. We will have processes in place so that when IT services move from one stage to another governance and funding models change as well.

Assumptions:

- Enabling student success and supporting the teaching/learning process is the primary reason for having IT services
- Campus service differentiation comes fundamentally from business process change not from deploying unique-to-campus technology solutions
- Effective strategic planning is not an episode; it is an iterative process
- It is important to balance operational efficiency with fostering collaboration and innovation
- Enterprise decisions should be based, as much as practical, on the enterprise data contained in our systems of record
- Different institutions have different breadth and depth of technical expertise
- Experiments and pilots with new or emerging IT services should be intentional; communicated broadly throughout the system; with a defined beginning and end; and possessing predetermined success criteria
- Many levels of governance must be taken into account in making decisions with systemwide implications. Existing governance structures will be used to support the decisionmaking process

Strategies:

- The various IT service providers among Minnesota State Colleges and Universities will move from a loose affiliation of autonomous activities to a planned, coordinated effort
- Simple, standard and reliable IT services will increases system-wide quality of service and promote cost efficiency

Service Delivery Strategy Document

Context and Introduction

This strategy is intended to describe our rationale for delivering IT services either centrally, regionally, or at an individual campus. The overall long-term aim of the strategy is to create a well-understood rationale and method for locating and funding IT services. This strategy is being developed in response to a goal established by the Technology Committee of the Board of Trustees for the Minnesota State Colleges and Universities. The goal is: "The committee will sponsor the development of a strategy for delivery of technology services so that these services can be provided efficiently while also sustaining an institution's ability to innovate and differentiate student and community services."

This strategy is intended to specify an end-state that will take from 3 to 5 years to achieve. The strategy development process is being led by the Vice Chancellor of Information Technology Services in collaboration with the Leadership Council's Technology Committee.

This strategy is intended to align specifically with MnSCU 2011 - 2014 Strategic Direction and Goals. The execution and anticipated contribution outcomes for this strategy are specified in Appendix A.

• System-wide services will be standardized wherever possible. Unique or non-standard technology will be deployed only as an intentional exception to this default mode

The Current Situation

- The service inventory is not complete or published
- There is, on occasion, a lack of trust among campus CIOs regarding Office of the Chancellor completing timely delivery of centralized services
- There can be tension or confusion concerning which services will be offered and what the process is for engaging with others that are providing similar services
- Campuses struggle to align with informal or undocumented "standards"
- The ITS division in Office of the Chancellor can be slow to respond with emerging technologies creating pressure on Colleges and Universities to seek autonomous solutions
- It is unclear whether "cost savings" is a sufficient reason to position services centrally
- It is unclear if is it acceptable for an institution to opt-out of a centralized service
- The average budget for central computing in our two-year institutions is \$1,198,531. The national average for like institutions is \$5,678,889. The average budget for central computing in our four-year institutions is \$7,040,000. The national average for like institutions is \$18,978,369. This data indicates that centralized IT services are saving more that 100 million dollars a year for our system. (Data source: 2009 Campus Computing Project National Survey of Computing and Information Technology in America Higher Education)
- Sometimes pilot projects are launched without a process or framework to evaluate, discontinue or expand the service. This increases complexity and reduces agility for the system as a whole
- There is a lack of governance for converting pilots to system-wide services
- This is no roadmap or framework for sharing single campus technology initiatives horizontally across the system
- Staffing levels and responsibilities are not consistent from campus to campus
- Many campus CIOs use valid (but individualized) rules-of-thumb such as " if it is academic technology and not D2L support it at the campus level, if it is an administrative technology, look at what is offered at the system level, if not offered, the campus can/should do it. Finally, if my local organization can provide a service to others that can be distributed at a lower cost, provide that service."
- Regional consortia and other ad hoc collaborative efforts are operating with success
- The shared services model, as is being formed with the Campus Service Cooperative shows promise and is gaining acceptance throughout the system

Objectives: What we will do over the next 3 years.

To accomplish the vision, the following would have to take place:

- Create a comprehensive Strategic Plan for IT within and throughout the Minnesota State Colleges and Universities System; this plan will be aligned with the Board of Trustees System Strategic Plan as well as the institutional strategic plans
- Develop an ongoing process to update the IT Strategic Plan

- Create an understanding of what needs to be uniform across the system (e.g. transactional systems that automate common processes or common reporting requirements)
- Define the systems and services to be delivered centrally for the common good
- Develop a service catalog that includes pertinent data on enterprise services, services shared between institutions and individual campus services
- Create an environment that encourages everyone to participate in seeking new IT services or policies to support current and emerging business strategies
- Develop a services lifecycle that includes a process to fund and implement new services, a process for identifying and migrating technologies from campus-wide scope to enterprise-wide, and a process for discontinuing support for antiquated services

As a result:

- Enterprise-wide services will be mapped to the business processes or strategies they support
- All IT service providers will be operating from a documented and well-understood roadmap of experimental, emerging, established, and obsolete information technologies
- Stakeholders will receive value because IT services are planned, focused, aligned, and cost effective

Priorities for Change (action plan)

- Produce a project plan to identify scope, resources, and timeline
- Produce up-to-date inventory of services
 - Office of the Chancellor (system-wide enterprise infrastructure and applications)
 - Consortia/collaborations
 - Campuses
- Identify candidate services to become enterprise-wide services to avoid confusion and create cost efficiencies
- Identify 2 or 3 styles of service positioning
- Establish an ongoing process for reviewing service positioning
- Publish Enterprise Architecture roadmap
- Identify gaps or misalignments in service delivery, resources and funding
- Prioritize projects to address gaps
- Agree on overall financial plan and incremental finance rules
- Identify decisions to be made and process/responsibility to decide and act
- Plan and execute an effective change management process including executive level support

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Appendix A: Execution and Anticipated Contribution Outcomes

<u>Strategic Direction 1</u>: Increase access, opportunity and success.

By planning and execution of aligned actions, IT services selection and placement will contribute by:

- a) Reducing unnecessary duplication of service expenditure though tiers of services that optimize the effectiveness of value delivery while minimizing expenditures (goal 1.3)
- b) Minimize the use of personnel resources to accomplish similar outcomes while providing sufficient cross system depth of resources and experience (via selective standardization and training) to minimize operational risks (goal 1.3)
- c) Position services and system to best facilitate the focus on student graduation or transfer (goal 1.4).

<u>Strategic Direction 2</u>: Achieve high-quality learning through a commitment to academic excellence and accountability.

By:

- a) Measuring delivery value success will be based on a criterion that includes the locating and funding of IT services in signal or multiple efficient and effective delivery options that best deliver value for education programs and student services. The selection of which optimize the overall system delivery value while supporting initiatives and flexibility needed to achieve regional or local educational objectives (goal 2.3).
- b) Using approaches that build and sustain capacity in technical talent that bring and maintain service knowledge currency, professional skills and cultural competency to facilitate the overall delivery to student's educational outcomes (goal 2.4)

<u>Strategic Direction 3</u>: Provide learning opportunities, programs and services to enhance the global economic competitiveness of the state, its region and its people. By:

- a) Locating and funding IT services that facilitate workforce education and training that are recognized (as measured externally) as leading in the higher education field on delivery outcomes (goal 3.1).
- b) Creating assets that support regional viability objectives where justified (goal 3.2).
- c) Selection of appropriate ties of services and funding models that optimize individual institutions ability related to overall expenditures that allow attention to developing other capacities of value to their region and interest in meeting employees needs (goal 3.3).

<u>Strategic Direction 4</u>: Innovate to meet current and future educational needs.

By aligning leadership activity for academic and operational outcome effectiveness via IT services locations and funding:

- a) Deliver on needs today while being future-focused (goal 4.1),
- b) Fully utilize talent and sharing of personnel resources to have an aligned approach to addressing system, regional and local challenges (goal 4.2)
- c) Develop accountability methods to optimize system positions and personnel resources to focus on outcome efforts that leverage the combined benefits of balancing innovation and stability.

d) Routinely examine and improve structures, technologies, policies and processes to support strategic system outcomes (goal 4.4)

<u>Strategic Direction 5</u>: Sustain financial viability during changing economic and market conditions.

Through:

- a) Fiscal stewardship and prioritization of core mission priorities. Identify centralized, regional, campus or outsourced approaches where expenditures deliver high value outcomes (goal 5.1)
- b) Rigorously reduction of unnecessary expenditure (goal 5.2)
- c) Develop and leverage alternative relevant funding sources to supplant revenues from state appropriations, tuition and student fees (goal 5.3)
- d) Partner whenever possible with other institutions, including the University of Minnesota, to share resources, services and purchasing processes.

Appendix B: Placement of Responsibility

This is a representative but incomplete list of services as of April 6, 2011.

y/Component ise Resource Planning urse Management gree Audit ance man Resources dent Information g Management urning Management System earning Media dent Email urning Media dent Email urning Kedia dent Email urning Media dent Email urning Media dent Email urning Media dent Email urning Media dent Email urning Management vate plication Management vate vate blic vate vate blic vate vate plication Management source Scheduling curment Management modity Hardware CA	System Cor	Itement of Responsi Isortium Institu Institut Institu	bility tition Program	Investment all all all all all all all all all all	Current Technologies ISRS Degree Audit Reporting System SWIFT SCUPPS ISRS SCUPPS ISRS SCUPPS ISRS SCUPPS ISRS SCUPPS ISRS SurFT Group Mill, "U of M partnership" Live@EDU, Gmail Group Wise, Exchange, Live@EDU, Gmail Group Wise, Exchange, Live@EDU, Gmail StartD S
ions ea Network rea Network twork Services ny Services Support st Technical and Engineering Services Support signage	•••••		•••••		DHCP / DNS / WINS

Appendix B: Placement of Responsibility

This is a representative but incomplete list of services as of April 6, 2011.

Cate	egory/Component	Svetem	Placement of R	esponsibility Institution Pro	oram	Convergence	Investment	Current Technologies
,		marcha			21 1111			
Secu	urity							
	Security Cameras, Door Access, and Systems		•	•		•		
	Network, Server, and Desktop Security	0		•		•		
	Payment Card Industry		0	•		•		
End	-user Support							
	Help Desk	0	•	•		•		
	Workstations for Staff	•	•	•		•		
	Administrative Application Support	•		•		•		Raiser's Edge, Knowledge Lake etc.
	Forms and Software Development	•		•		•	110	
	Hardware Repair Center	•		•		•		
Inst	ructional Technology and Support							
	Classroom Technology		•	•		•		
	Instructional Design Support	•	•	•		•		
	Technology Training and Professional Development		•	•		•	00	
Key					A	cronyms		
	Inappropriate/not applicable				<u> </u>	HCP- I	Dynamic Host Cc	onfiguration Protocol
0	Fringe, experimental/localized/pilot/high risk/no guarantee of av.	'ailability/inadvi	sable		D	NS- I	Domain Name Syst	em
0	Secondary, developmental/limited/distributed/exploratory/under	consideration/lc	ow risk/moderate ava	ulability	SI	IRS-	Integrated Statew	ide Records System
\bigcirc	Primary, production/mainstream/enterprise/preferred/adopted/lov	w risk/high avai	lability/funding prio	nity	S	CUPPS-	State College & L	Jniversity Personnel Payroll System
•	High convergence				S	WIFT-	Statewide Integra	ted Financial Tools
•	Moderately high convergence				3	-SNI	Windows Internet N	Vame Service
igodot	Moderate convergence							
●	Low convergence							
0	No convergence							
	High investment							
	Moderately high investment							
	Moderate investment							
	Low investment							
	No investment							

Appendix C: References

- For interesting and elegant technology principles, see Brown University IT Strategic Plan pp. 9-11 <u>http://www.brown.edu/cis/about/itsp_v2.pdf</u>
- For discussion of interplay between centralized services providers and campus service providers see Washington State Community and Technical Colleges' Strategic Technology Plan p. 15 <u>http://www.sbctc.ctc.edu/docs/strategicplan/strategic_technology_plan.pdf</u>
- For an example of a plan with specific delineation of campus and centralized service provider roles see
- http://www.vccs.edu/Portals/0/ContentAreas/ITS/VCCS_ITStrategicPlan.pdf
- Also of interest is http://cs.uwsa.edu/documents/CommonSystemsRoadmapV1_2.pdf
- For information about the Campus Computing Project see http://www.campuscomputing.net/2009-campus-computing-survey
- For detailed report of ITS 2011 Customer Satisfaction Survey see <u>http://www.its.mnscu.edu/documents/Final_Draft_MnSCU_ITS_Survey_v4.pdf</u>



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