



**TECHNOLOGY COMMITTEE
MARCH 16, 2011
9:00 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 January 18, 2011 (pp. 1-5)**
- (2) Information Technology Update
- (3) Students First Report (pp. 6-7)
- (4) Information Security Program Review (pp.8-29)

Members

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
January 18, 2011**

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

Technology Committee Members Absent: *David Paskach, Chair;*

Other Board Members Present: *Scott Thiss, Board Chair, Clarence Hightower Vice Chair, Chancellor James McCormick, Trustees Alfredo Oliveira and Louise Sundin*

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 January 18, 2011, at Wells Fargo Place, 4th Floor, Board Room, 30 East 7th Street in St. Paul. Vice Chair Frederick called the meeting to order at 2:00 p.m.

Approval of the Technology Committee Meeting Minutes
Vice Chair Frederick called the committee to order.

1. Minutes of November 16, 2010 Technology Committee

The minutes of November 16, 2010 were approved as submitted.

2. Information Technology Update

Vice Chancellor Huish provided an update on the spring semester start from the enterprise perspective. At this early point in the semester start, things are going well. Higher Education is unique in that the annual load profile experiences two periods a year where technology activity moves from relatively idle to high usage. The systems technology division takes extraordinary measures to ensure a smooth start of the semester. Many institutions across the country would envy this performance report.

Minnesota State Colleges and Universities instruction management system exemplifies the successful management during high usage. On January 10, 2011, the system had 16,000 unique logins between 9:00 a.m. and 1:00 p.m.. This equals seven unique logins or people signing into the system to get every second for five consecutive hours.

Vice Chancellor Huish stated that under Chief Operations Officer Carolyn Parnell's leadership the application programming development teams have evolved to include security experts, usability and accessibility experts and quality

assurance professionals. Brining these experts together at the beginning of application development is not only a best practice but also a sign of the continued maturity of the ITS division.

Carolyn Parnell responded that in the last few years the security program has cycled through addressing network security issues, providing training to information technology campus staff and addressing Payment Card Industry requirements. In the last year, the security program began addressing the issues with application security development. Many issues identified in past KDV audits were resolved with the development of an application security module. The ITS division conducts an internal risk assessment. Application owners are provided with an assessments followed by a mitigation report. This process of self-auditing demonstrates technology division's commitment to both productivity and prevention of security issues.

3. Review Board Goals

Vice Chancellor Huish reported that with the help of President Ramaley, the Leadership Council Technology Committee activities have been brought into alignment with the board goals.

Vice Chancellor Huish presented the Board Goals matrix used to highlight progress on each goal. Goal number one states that the Trustees will deliver the progress of the Student First initiative. Jonathan Eichten will provide a Students First report later in this meeting.

The second goal states that the Trustees will deliver related activities that respond to the Office of the Legislature Audit. This goal is almost complete; a customer satisfaction survey is the only remaining activity. The survey was scheduled for completion in November; however, it was partially delayed due to the cycles of activity on the campuses. The survey will be released later this month.

Work has begun on the third goal. The Board of Trustees Technology Committee will sponsor the development of a strategy for delivery of technology services. A small workgroup consisting of Chief Operating Officers from seven institutions has been formed to help clarify the service delivery strategies which will be used to determine placement of services; centrally, regionally or locally. This work group will review a draft strategy document and will assist in development.

4. Day in the Life of a Student Services Provider

Vice Chair Frederick stated that there would be two presenters providing information on the day in the life of a service provider.

Vice Chancellor Huish introduced Phillip Schroeder, Vice President, Student Affairs from St. Cloud Technical and Community College and Landon Pirius, Dean of Students Affairs and Enrollment Management from Inver Hills Community College.

Phillip Schroeder presented a chart that showing an enrollment growth rate of 26% at Saint Cloud Technical and Community College in the last four years. Faculty growth has followed enrollment trends. In contrast, very little support staff growth has taken place. This makes it critical to have the technology provided by the enterprise and used to support students critical.

Phillip Schroeder provided summary of Saint Cloud Technical and Community College's online one-stop shop student services. The students use technology that has been integrated with the enterprise ISRS system. This interactive web application allows students to manage the necessary financial, academic and registration activities from one website. Highlights of this application are the ability for students to manage academic activities while attending multiple institutions and the waitlist.

Landon Pirus provided an on campus staff perspective to one-stop shop student services offered at Inver Hills Community College's Enrolment Center. Over the last six years, the services have been bundled together. These services include admissions, records, registration, billing, cashiering and orientation. The enrollment staff is prepared to answer student questions in any of these areas. Financial aid is not included on the one stop shop at this time; however, the hope is to add it in the future.

Examples of technology used by Inver Hills Community College enrollment staff include the ISRS student information system, E-transcript, ImageNow and Hobson. The ISRS student information system has been integrated allowing staff to move from one screen to another without requiring them to log into multiple sites to perform tasks. E-transcript was developed by the enterprise. This allows a student to pull up their transcripts and import info into Degree Audit Reporting system to produce a transfer report in a matter of minutes rather than days. Being able to provide transfer information quickly is one component in helping a student decide where to attend college. Several campuses are sharing ImageNow. The server is located at Minnesota State University Mankato. The participating campuses pay for the use and access to the data. ImageNow provides a repository for scanned document, allowing the campuses to store and access electronic copies of students' documents. This eliminates the need to file and store paper copies. Hobsons is a communications module; several campuses use this module to recruit prospective students, track their marketing dollars and improve their retention efforts. The retention module has an early alert component, which allows the campuses to engage in communication before a student fails a course. In the future, the campus hopes to track student engagement and interactions to pin-point the activities that help a student be successful. Over time, this data may assist in making staffing or budget resource decisions on which students services have the most impact.

Trustee Van Houten inquired if the professors have the ability to override class capacity. President Ramaley confirmed that the professors have complete discretion and can make accommodations. The wait list is not just a valuable tool to the students. It is also a valuable planning tool, which allows the campus to track the number of seats filled and the emerging patterns in course registration in order to make decisions. In the past, this process required a hand audit.

Trustee Krinkie inquired if there was a system report on the capacity or number of seats offered in a semester versus the number of seats filled. Vice Chancellor Huish responded that the data is available but uncertain if it would be at a systemwide level or only available by individual institution. Trustee Krinkie stated that with the dynamic changes that are taking place one could expect the legislature to look at what the impact the change in funding and staffing impacts the students. This tool helps manage courses better, but in addressing the Legislature, evidence of the ways the system is optimizing resources will be beneficial. These numbers may be at a macro level. Vice Chair Huish responded that the data is available, it will need to be analyzed. A report can be generated at this macro level.

Trustee Dickson responded that Trustee Kinkie's question is a good one. One of the questions the Trustees have been asked is as the systems budget has been reduced it has continued to provide good service, did the system really need all that money. Several things happened that made all of the progress technology made possible, including the Governor and the Legislature's investment in technology. Now the system is seeing the results of that investment. The tools discussed earlier today are examples of the efficiencies and optimization of the available resources. What is yet to be determined is how much more the budget reductions may be pushed before the system is not sustainable. The legislature needs to hear the story about the great improvements to technology and wonderful people who implemented it which helped us absorb the cuts in a way that would not have been possible previously.

Trustee Sundin inquired how the campus responds to those students that are techno-phobic. Landon Pirius responded that since the creation of the one stop shop and changes in technology, the staff has reported that questions students submit tend to be more complex. Less time is needed to assist those students who are comfortable with technology. The staff spends additional time to help the techno-phobic by walking them through the processes.

Trustee Sundin inquired if the implementation of technology by groups of institutions could have been done more efficiently? Landon Pirius responded that it might have been more efficient to implement ImageNow systemwide. This document imaging services was not available systemwide. Several campuses worked as a group to implement and develop these technologies. Efficiencies have been realized by housing the ImageNow server at Minnesota State University Mankato rather than at each institution. The cost of Hobson was

negotiated by the system and each campus made a choice whether or not to purchase the software (17 institution bought this). The implementation and development of Hobson may have been more efficient with a system approach. Vice Chancellor Huish responded that this question draws attention to the third goal of developing a service delivery strategy. The goal is to develop a rigorous protocol that will be used to determine which technologies will be implemented centrally, regionally or locally. Right now, these decisions are made on a case-by-case basis.

Trustee Sundin inquired how the system is doing as compared to other agencies or nationally. Vice Chancellor Huish offered an opinion that the system is above average in availability and reliability; when it comes to services for students, the system is probably in middle of the road. This is based on what technology tries to do as a statewide system. In the trade off to serve 400,000 students decisions are made based on quantity versus unique quantity of services.

Vice Chair Frederick thanked the presenters for their comments.

5. Students First Report

Vice Chancellor Huish introduced Jon Eichten, Director of Students First who presented the Students First Progress Report. Jon Eichten reported that progress continues on each of the Student First projects; today the presentation will focus on the single application project. This module will allow students to complete one application while apply to multiple institutions. The module allows individual institutions to include supplemental questions and addresses the uniqueness of each institution. Some of the benefits of this project are ease of use for students attending more than one institution or those participating in shared or articulated programs and for returning students. Usability and efficiency has been built into the systems. This will allow students to complete and save a section of the application before moving on to another component of the application. This and all other projects will go through a formal usability review.

A copy of the Students First report can be found at www.studentsfirst.project.mnscu.edu .

Vice Chair Frederick adjourned the Board of Technology Committee.

The meeting adjourned at 3:03 p.m.

Respectfully submitted,

Christine Benner, Recorder

**MINNESOTA STATE COLLEGES AND UNIVERSITIES
BOARD OF TRUSTEES**

Agenda Item Summary Sheet

Committee: Technology Committee

Date of Meeting: March 16, 2010

Agenda Item: Students First Report

Proposed
Policy Change

Approvals
Required by
Policy

Other
Approvals

Monitoring

Information

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

The third 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

Darrel Huish, Vice Chancellor and Chief Information Officer

Outline of Key Points/Policy Issues:

Background Information:

Students First embodies projects in several key areas of student services, including application, registration, billing, payment, academic planning, and shared services. Additional documents will be presented at the meeting.

**BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES**

INFORMATION ITEM
Technology: Students First Report

BACKGROUND

Jonathan Eichten, Students First Director and Joanne Chabot, Associate Vice Chancellor will present a comprehensive report on Students First projects. Most recent status will be reflected in handouts to be provided at the meeting. 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

Committee: Technology Committee

Date of Meeting: March 16, 2011

Agenda Item: Information Security Program Review

Proposed
Policy Change

Approvals
Required by
Policy

Other
Approvals

Monitoring

Information

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

The Technology Committee members agreed in September to hold presentations of vignettes; this presentation will focus on security. Bev Schuft, Director of Information Security will present a review of the Information Security Program.

Scheduled Presenter(s):

Bev Schuft, Director of Information Security

Outline of Key Points/Policy Issues:

Background Information:

Additional presentations from the faculty, student and administrator perspectives will take place at future meetings.

**BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES**

INFORMATION ITEM
Technology: Information Security Program Review

BACKGROUND:

Bev Schuft, Director of Information Security will present a review of the Information Security Program.

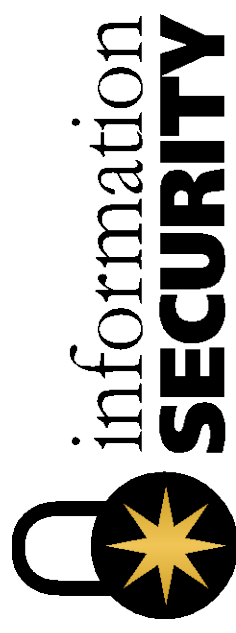


Information Security Program

Board of Trustees Technology Committee Presentation

Presenter: Bev Schuft

Date: March 16, 2011





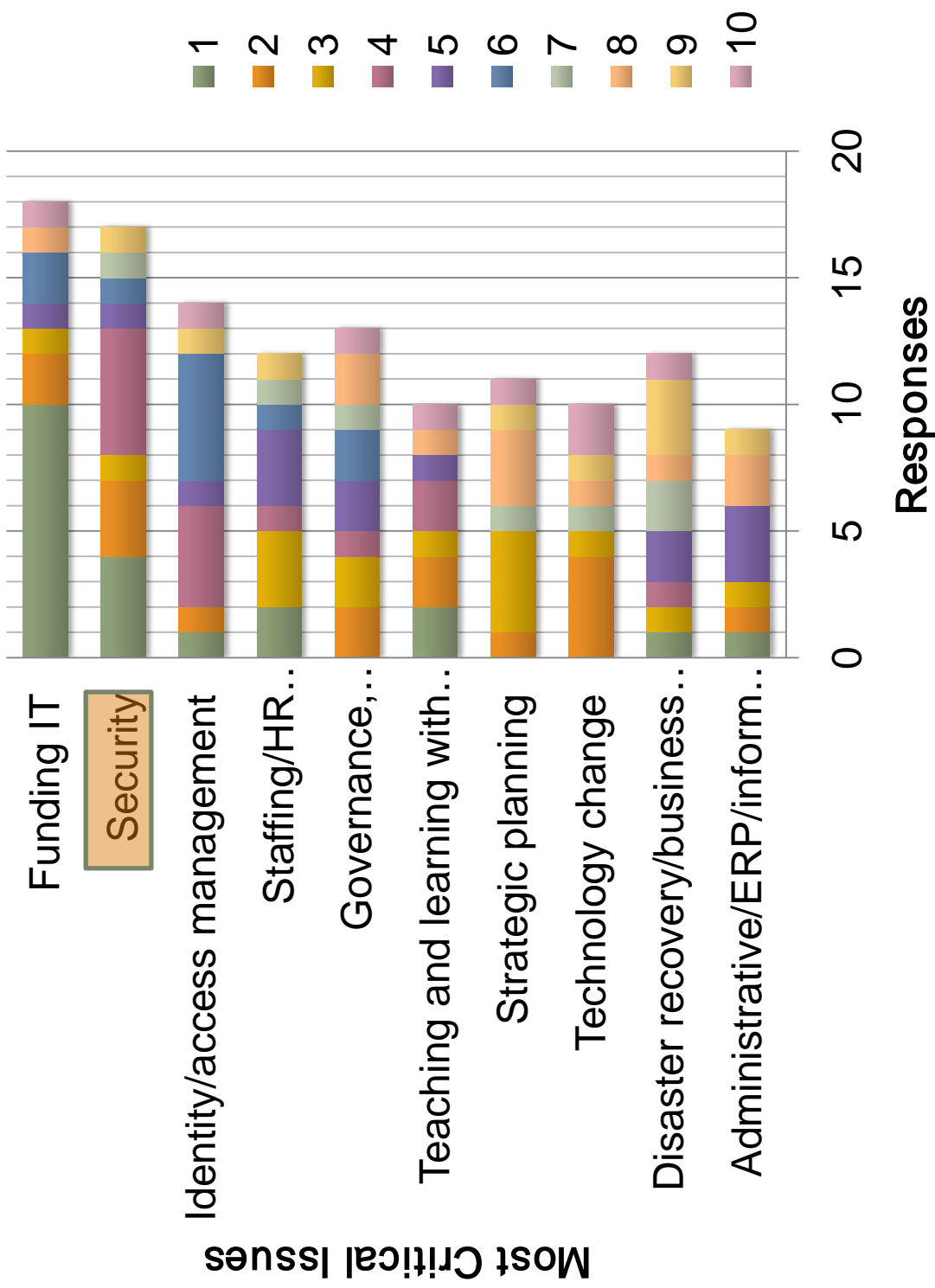
Top-Ten IT Issues - Educause

<u>2010</u>	<u>2009</u>	<u>2008</u>
Funding IT	Funding IT	Security
Admin/ERP	Admin/ERP	Admin/ERP
Security	Security	Funding IT

Information Security has been in the Educause top 3 strategic issues for the past 7 years



System CIO's Top Issues: October 2010





Cybercrime: A Recession-Proof Growth Industry

- 95,000 pieces of malware (malicious software) analyzed by Sophos Labs every day in 2010 - nearly doubling the number tracked in 2009

Cybercrime Products – 2010 going rates

- Credit Card Details – From \$2 - \$90
- Bank Credentials – From \$80 - \$700 (with guaranteed balance)
- Bank Transfers and Cashing Checks – From \$10 – 40% of the total
- Online Stores & Pay Platforms – From \$80 - \$1500 with guaranteed balance

Cybercrime: Identity Theft



Information Security Program



Information Security Program

- To protect information resources against unauthorized use, disclosure, modification, damage or loss
 - Policies, procedures & guidelines
 - Risk analysis & assessment
 - Secure development & procurement practices
 - Incident response





Information Security Assessment

- A Team of security specialists completed a security assessment for every campus to:
 - Provide a security benchmark
 - Identified risks, priorities and remediation strategies
 - Increase security awareness on campuses
- Aggregated assessment results for system wide security initiatives

Information Security Training for Campus Technical Staff

17 Security Courses

- Information Security Essentials
- Desktop Administration
- Network Administration
- Server Administration
- Security Management
- Encryption
- Programming



Board Policy 5.23 Security and Privacy of Info Resources

9 Guidelines

- Passwords
- Data Sanitization
- Patch Management
- Anti-malware
- Data Backup
- Incident Response
- Encryption for Mobile Computing
- Vulnerability Scanning
- PCI Technical Requirements





Vulnerability Management

- Regularly check every network device for actual or potential security problems
 - 30,000 devices scanned at least quarterly
 - 9,000 “visible” from Internet also scanned monthly
 - Problems found are prioritized for remediation
 - 30% reduction of Internet-visible vulnerabilities in past 3 months
- Cost: \$3.55/device scanned/year



Patch Management

- To fix the unpatched systems identified using vulnerability tools
 - Established a contract for licenses at greatly reduced prices
 - \$2/license/device
- Email response we received by one campus after purchasing and using the patch management software

“SWEET”



Web Application Security

- 75% of attacks are directed at applications
- Implications for System Applications: moving toward more web accessible applications
 - Web applications were evaluated
 - Secure coding classes held for developers
 - Security testing tool provided
 - Software Security Task Force established in enterprise developer group

Gartner Report



Risk Assessment

- Proactive approach to understand, analyze, and measure information risk
 - provides foundation for quantifiable information risk management
- Successfully conducted first assessment of an application
 - risk mitigation plan will improve application & reduce risk to acceptable levels

Payment Card Industry Data Security Standards (PCI DSS)

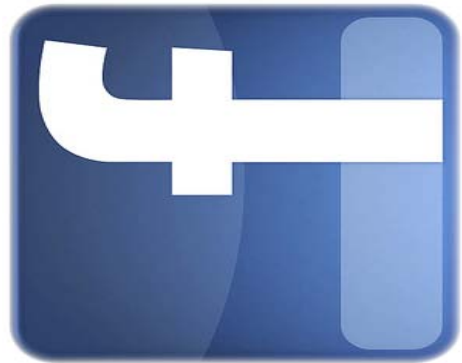
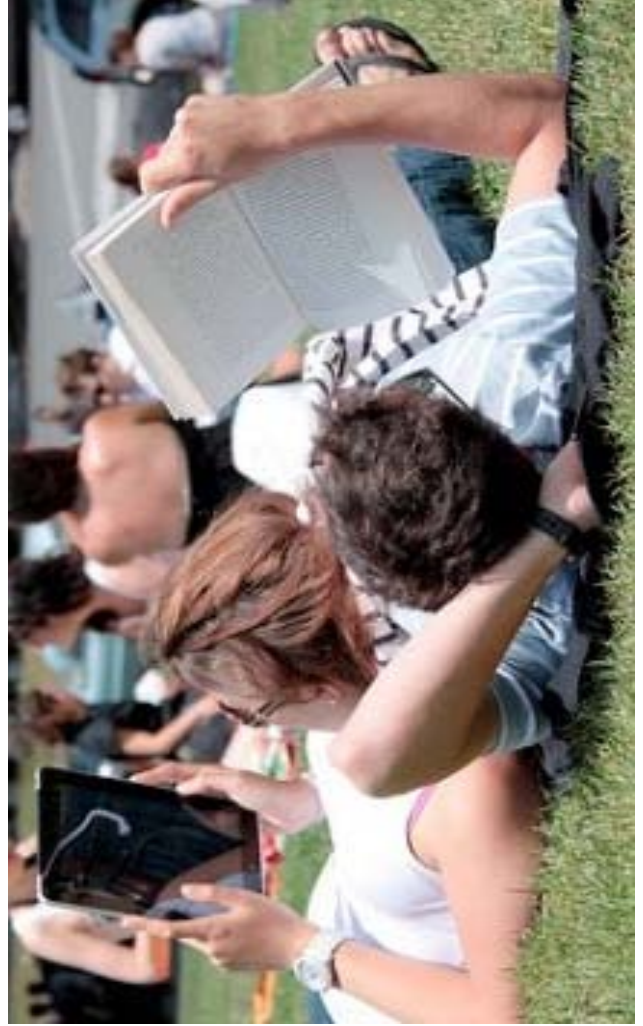
- Provides a set of requirements for securing cardholder data that is:
 - Stored
 - Processed
 - Transmitted
- Compliance is a continuous journey – Annual self assessment questionnaire and possible quarterly network scans are required
 - Both technical and administrative areas need to be addressed



Trends and Challenges



Twitter



A Dime's Worth of Data





Challenges

- Changing work/study environment
 - Growth in mobile devices & applications
 - End users are bringing in their own technology devices
 - Growing use of social media
- Changing nature of threats
 - Hacking is a profitable industry
 - Significant growth in malware
 - Application vulnerabilities new target of opportunity
- Growing compliance requirements
 - PCI DSS
- Balance between convenience and security

