

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

Agenda Item Summary Sheet

Committee: Finance, Facilities and Technology **Date of Meeting:** March 19, 2008

Agenda Item: Enterprise IT Investment Plan Update

Proposed Policy Action Approval Required by Policy Other Approvals Monitoring

Information

Cite policy requirement, or explain why item is on the Board agenda: The board has asked to be updated on a recurring basis on progress in implementing the approved IT Strategic Investment Plan.

Scheduled Presenter(s): Ken Niemi, Vice Chancellor for Information Technology – Chief Information Officer

Outline of Key Points/Policy Issues: Vice Chancellor Niemi will present a review of the current status of FY08 Enterprise Investment projects' progress, risks and issues.

Background Information: This report provides an update on the progress in implementing the Enterprise Investment Plan and an overview of current project status and issues.

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

INFORMATION ITEM
Enterprise Information Technology Strategic Investment Plan Update

BACKGROUND

The Board of Trustees has asked that they be updated on the ongoing activities in implementing the Enterprise Information Technology Strategic Investment Plan. Since the last update for the Committee in December of last year, significant progress has been made in ongoing project implementation and planning for FY 09 activities.

Vice Chancellor and Chief Information Officer Ken Niemi will brief the committee on the current status of projects, new project planning and implementation, and highlight any overall issues and concerns.

Date Presented to the Board: March 19, 2008



Enterprise IT Investment Plan Progress FY08 Initiatives

Strategic Directions and Goals Summary 2006-2010

1: Increase Access & Opportunity

2: Promote and measure high-quality learning programs and services

3: Provide programs and services integral to state and regional economic needs

4: Innovate to meet current and future educational needs efficiently

Enterprise Information Technology - FY2008 Major Goals

<p>Network & Data Center Modernization</p> <ul style="list-style-type: none"> • 7 State Universities • 27 Community / Technical Colleges • Total: \$2,167,240 	<p>Student Services & Online Learning</p> <ul style="list-style-type: none"> • 6 State Universities • 14 Community / Technical Colleges • Total: \$761,167 	<p>Enable Career, Business and Entrepreneurship</p> <ul style="list-style-type: none"> • 1 State University • Total: \$100,000 	<p>New Technology Architecture</p> <ul style="list-style-type: none"> • 2 State Universities • 9 Community / Technical Colleges • Total: \$291,079
<p>Security Management</p> <ul style="list-style-type: none"> • 5 State Universities • 14 Community / Technical Colleges • Total: \$667,337 	<p>Faculty Research and Development</p> <ul style="list-style-type: none"> • 5 State Universities • 10 Community / Technical Colleges • Total: \$575,756 	<p>How the \$5,000,000 allocation to campuses is supporting the Strategic Direction and ITS Goals</p>	
<p>Identity Management</p> <ul style="list-style-type: none"> • 1 State Universities • 4 Community / Technical Colleges • Total: \$76,000 	<p>Retoiled Administrative Systems</p> <ul style="list-style-type: none"> • 2 State Universities • 5 Community / Technical Colleges • Total: \$340,980 		

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Strategic Directions and Goals Summary 2006-2010

1: Increase Access & Opportunity

2: Promote and measure high-quality learning programs and services

3: Provide programs and services integral to state and regional economic needs

4: Innovate to meet current and future educational needs efficiently

Enterprise Information Technology - FY2008 Major Goals

<p>Network & Data Center Modernization</p> <ul style="list-style-type: none"> • Redundant network paths • Enterprise performance monitoring tools • Secondary data center • Firewall replacement 	<p>Student Services & Online Learning</p> <ul style="list-style-type: none"> • Diploma transfer for H.S. • Regis • ISRS communications module • Graduation planner 	<p>Enable Career, Business and Entrepreneurship</p> <ul style="list-style-type: none"> • iSeek 	<p>New Technology Architecture</p> <ul style="list-style-type: none"> • Oracle conversion ISRS • Uniface to J2EE migration
<p>Security Management</p> <ul style="list-style-type: none"> • Security event monitoring • Security assessment instruments • Vulnerability management • Incident response 	<p>Faculty Research and Development</p> <ul style="list-style-type: none"> • Gaming and simulation development • Continued learning objects development. 		
<p>Identity Management</p> <ul style="list-style-type: none"> • Identity and access management 	<p>Retooled Administrative Systems</p> <ul style="list-style-type: none"> • CAP application migration • Quality assurance improvements • APPS • Unifier • Classification & compensation • Campus reporting enhancements • Prinsys • Budget module 		

Projects >\$100k

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Strategic Directions and Goals Summary 2006-2010

1: Increase Access & Opportunity

2: Promote and measure high-quality learning programs and services

3: Provide programs and services integral to state and regional economic needs

4: Innovate to meet current and future educational needs efficiently

Enterprise Information Technology - FY2008 Major Goals

	<p>Student Services & Online Learning</p> <ul style="list-style-type: none"> • Web aid apply, failure notification, last date of attendance, satisfactory academic progress • Online library access and development • DARS/CAS • eTranscript • Student housing module rewrite 		
<p>Security Management</p>	<p>Faculty Research and Development</p>		
<p>Identity Management</p>	<p>Retooled Administrative Systems</p> <ul style="list-style-type: none"> • Applicant tracking • Public Affairs next generation website • Support labor relations and grievance management • Total compensation module • Classification and compensation 		

Projects <\$100k

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Enterprise IT Investment Plan Progress

- MnSCU has one of the largest Wide Area Networks (WANs) within higher education across the entire country
 - Connects all institutions together
 - Connects all of MnSCU to the internet
- Upgraded routers
 - Campuses were exposed to significant risk
 - This involved replacing over \$1 MM of infrastructure located *on the campuses*
- Also connects MnSCU to the University of Minnesota, State and Local Government

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Enterprise IT Investment Plan Progress

- Router Upgrade (continued)
 - Nearly 40 router upgrades have now been completed
 - Increases bandwidth and speed
 - Provides expanded capabilities required for new applications
 - Quote
 - “This gets us caught up with current technology and resolves some maintenance issues we deferred for the last few years. While router upgrades are planned for every five years, some of the routers were more than 8 years old.” – Mike Janke, project owner
 - There are a few router upgrades remaining for next quarter and then this maintenance is complete until 2012

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Enterprise IT Investment Plan Progress

- Firewall replacement is 2/3 completed
 - Over 70 sites, each requiring a separate firewall
 - In many cases, equipment was at least 8 years old
 - Original plans and industry recommendations call for replacing every 5 years
 - Again, this effort alone was in excess of \$1 MM
 - On target for completion by end of FY08

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Enterprise IT Investment Plan Progress

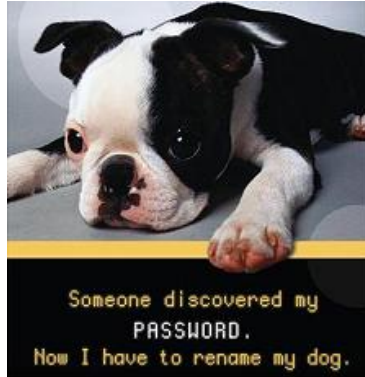
- Information Security
 - Campus security assessments are 2/3 completed with a detailed report of the findings delivered to each campus CIO. All remaining assessments have been scheduled.
 - 5 vulnerability management pilots are underway. Vulnerabilities are being identified and reported on.
 - Security Event Monitoring is in the requirements gathering phase. RFP is being developed with an anticipated release date of June 2008. Coordinating RFP process with OET. Working with 5 pilot campuses to validate requirements.

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Enterprise IT Investment Plan Progress

- Information Security Awareness Program



Public Jobs:Private Data

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Enterprise IT Investment Plan Progress

- Information Security Awareness Program
 - Joint development effort with the University of Minnesota
 - Supports MnSCU policy to provide security awareness resources for each campus
 - Web-based materials directed to all workforce members, total of 3 courses, easy and quick to complete
 - More than 11,000 employees have participated on the first course, and 10,000 on the second and third courses!

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Enterprise IT Investment Plan Progress

- Information Security Awareness Program Quotes
 - “I’ve been working here for 20 years and while I’ve always tried my best to deploy the best security practices, this course provides the rules, standards and the education to ensure I’m doing all that I can, everyday.”
 - “Implementation went very smoothly thanks in large part to the campus teams. I credit them with getting the word out and providing the necessary technical support.”
 - “We received zero calls regarding content issues, disappointments or complaints.”
 - “From the user perspective, it was designed to be short and impactful. The program is directly applicable to their jobs, easy to navigate and each course can be completed in about 20 minutes.

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Enterprise IT Investment Plan Progress

- Information Security Assessment Program
 - Security assessments at individual campuses to assist in risk management and compliance monitoring
 - Results in a roadmap tailored for each campus
 - Identifies current status and effectiveness of reporting
 - Also identifies compliance gaps and opportunities
 - Benefits include:
 - Enhanced staff knowledge of data handling practices
 - Protection and control of digital, non-public data
 - Benchmarks across all campuses
 - Phase I & II assessments have been completed and covered 24 institutions
 - Phase III assessments are underway and are scheduled for completion by the end of Q2 2008

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Enterprise IT Investment Plan Progress

- For the first time, a disaster recovery site and secondary data center are in place
 - If a natural disaster or other incident occurred 2 years ago, no options were available
 - Full failover for D2L will also be implemented by the end of FY08
 - If D2L goes down, real-time failover will occur
 - Failover capability for ISRS will also be implemented by the end of calendar 2008

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Enterprise IT Investment Plan Progress

- MnSCU was running out of storage space, both from a backup and redundancy perspective
 - 8-9 year old equipment
 - The Storage Area Network (SAN) efforts have resulted in automated tape backups
 - Increased operational efficiency
 - Reduced risk of extended down times

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Enterprise IT Investment Plan Progress

- Developed the infrastructure to support a single instance of all students, faculty and staff
 - Subset of personal data that doesn't change based on relationship with MnSCU
 - Allows students to apply at different institutions without repeatedly entering personal information
 - Reduces number of "lost" classes due to name change or older record keeping problems
- Will go live with the Oracle implementation in FY09

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Enterprise IT Investment Plan Progress





- RdB to Oracle database conversions
 - Vendor indicated support would be soon be discontinued for the obsolete technology
 - Difficult to find staff with skills to maintain and support
- Will be deployed this summer
 - Eliminates significant technical risk
 - Increases ability to integrate additional disparate applications
 - A big step toward a more flexible infrastructure environment




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Portfolio Management Office Timeline

Active Projects	Channel Owner	ITS Lead	Project Leader	FY08 Budget	2nd Quarter			3rd Quarter			4th Quarter			FY09	Current Overall Status
					Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.		
Secondary Data Center (COB) / Disaster Recover Site - DR Site and SAN re-architect - D2L Failover - Physical components - ISRS Failover - Physical components - D2L Failover / Recovery Process	Novak	Berndt	Hertenstien	\$1,100,000											
FY08 Firewall Replacement	Janke	Janke	Takkella	\$458,600											
Vulnerability Management Initiative (VMI)	Schuff	Schuff	Nelson	\$300,000											
Continuity of Operations	Schuff	Schuff	Nelson	\$60,000											
Identity and Access Management	Essa	Brumbaugh	Clothier	\$1,500,000											
Automatic Transfer of High School Data (Planning)	Chabot	Guida/Malecek	Swanson	\$0											
CAP Server Phase II	Rushenberg	Rushenberg	Hertenstein	\$270,000											
Budget Module	Stoddard	Malecek	McDonough	\$250,000											
ISEEK Business Solutions (Phase I - Planning)	Jacobson	Simmons	Clark	\$50,000											DONE
RDB to Oracle Conversion - ISRS	Chabot	Guida	Wyland	\$1,974,000											
J2EE Conversion - HR	Munos	Guida	Swanson	\$0											DONE
eTranscript	Langer	Guida	Roering	\$50,000											
Security Event Monitor	Schuff	Schuff	Nelson	\$300,000											
Information Security Assessment Program (ISAP)	Schuff	Schuff	Nelson	\$391,000											
Incident Response (Planning)	Schuff	Schuff	Novak	\$40,000											
eFolio	Langer	Essa	Swanson	\$550,000											
Graduation Planner (Planning)	Langer	Malecek	TBD	\$50,000											DONE
Redundant Network Paths	Janke	Janke	Takkella	\$500,000											
ISRS Communication Module	Chabot	Guida/Malecek	TBD	\$288,000											N/A
Continued Learning Objects/Expand Gaming Capacity	Langer	Dickhudt	Clark	\$275,000											DONE
Quality Assurance Improvements	Chabot/Essa	Guida	Roering	\$400,000											
APPS - Iterations I - III	Schoenecker	Rushenberg	Braun	\$600,000											
Unifier/PMIS Integration with ISRS	Johnson	Malecek	McDonough	\$264,000											
Reporting Enhancements for Campuses	Chabot	Guida	Clark	\$450,000											
J2EE Conversion - Accounting	Stoddard	Guida	Swanson	\$2,200,000											
Classification and Compensation	Skallman	Malecek	TBD	\$25,000											
DARS/CAS Modifications	Langer	Malecek	Thornton	\$50,000											
Public Affairs Website	Kohl	Crandall	Crandall	\$50,000											

Progress Key

-  Planning
-  Targeted Execution
-  Execution
-  Projected Project Start

-  Project is on plan
-  Minor issues exist, currently being addressed
-  Major issues exist project is at risk

Portfolio Management Office Timeline



Inactive Projects	Channel Owner	ITS Lead	Project Leader	FY08 Budget	2nd Quarter			3rd Quarter			4th Quarter			FY09	Current Overall Status
					Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.		
Enterprise Performance Monitoring Tools	Janke	Janke	TBD	\$250,000											N/A
REGIS (Planning)	Stoddard	Malecek	TBD	\$100,000											
Prinsys	Mercer	Malecek	TBD	\$425,000											
ISEEK Business Solutions (Phase II - Execution)	Jacobson	Simmons	TBD	\$550,000											
Financial Aid Modifications	Lopez	Malecek	TBD	\$100,000											N/A
Online Library Access Proxy	Langer	Janke	TBD	\$65,000											N/A
Student Housing Module	Bier	Malecek	TBD	\$75,000											N/A
Direct Deposit Module	Stoddard	Malecek	TBD	\$75,000											N/A
Labor Relations and Grievance Management	Leary	Malecek	TBD	\$30,000											N/A
Total Compensation Module	Skallman	Malecek	TBD	\$20,000											N/A
Applicant Tracking	Skallman	Malecek	TBD	\$55,000											

Progress Key

- Planning
- Targeted Execution
- Execution
- Projected Project Start

- Project is on plan
- Minor issues exist, currently being addressed
- Major issues exist project is at risk



Additional Details on Project Issues

As of February 29, 2008

The Minnesota State Colleges and Universities system is an Equal Opportunity employer and educator.



Additional Details on Project Issues

- The following pages provide additional details for all projects reporting an overall status of “yellow”
 - “Yellow” is defined as issues exist, but are currently being addressed
- Reflects status as of February 29

Slide 2



FY08 Firewall Replacement

- Overall Status
 - Yellow – project has been re-prioritized and is now being executed as high-priority
- Schedule
 - Yellow – behind original schedule, reset completion date to June 08
- Scope
 - Green – scope change documentation has now been completed
- Cost/Resources
 - Green – on track

Slide 3



Continuity of Operations (COOP)

- Overall Status
 - Yellow – project currently behind schedule
- Schedule
 - Yellow – 2 sub-teams have not completed updates, schedule has been adjusted
- Scope
 - Green – no major impact to scope
- Cost/Resources
 - Green – on track

Slide 4



Identity and Access Management (IAM) Program

- Overall Status
 - Yellow – need operations and infrastructure team support of technical component build, decision to utilize Sun System integrators to assist will impact budget
- Schedule
 - Yellow – will be re-baselined in March based on recommendation from Sun
- Scope
 - Green – critical milestones, deliverables and decision points have been realigned
- Cost/Resources
 - Green – although if outside Sun contractors are utilized, project budget will be impacted

Slide 5



Cap Server Phase II

- Overall Status
 - Yellow – one campus will not have access revoked to the old queries until April, everything else proceeding as planned
- Schedule
 - Green – all other access to old queries was revoked on February 29th with minimal issues
- Scope
 - Green – no anticipated changes
- Cost/Resources
 - Green – anticipated requests for campuses have been taken into account and resource staffing has been planned accordingly

Slide 6



Redundant Network Paths

- Overall Status
 - Yellow – re-planning in progress
- Schedule
 - Yellow – revised plan in progress
- Scope
 - Yellow – additional potential changes are being evaluated
- Cost/Resources
 - Yellow – details being finalized, pending outcome of scope changes

Slide 7



Unifier / PMIS Integration with ISRS

- Overall Status
 - Yellow – experiencing delays with receiving information and data from vendor and business unit
- Schedule
 - Yellow – testing is behind schedule due to delays in defining business processes. Waiting for response from vendor to determine schedule impact
- Scope
 - Yellow – additional business process transactions have been identified, impacting time and complexity of project
- Cost/Resources
 - Green – additional funding request has been approved

Slide 8



Cross-functional Advisory Group (CAG) Meeting Summary



Cross-Functional Advisory Group Participants

- **AFSCME**
 - Karen Foreman, MnSCU Policy Committee
- **IFO**
 - Nancy Black, President
 - Russ Stanton, Dir., Gov't Relations
 - Kathy Summa, Academic Affairs, WSU
- **MAPE**
 - Melissa Arneson, BSU
 - (Lucinda Jones, Normandale CC)
- **MSCF**
 - Joe Juare, Treasurer
 - Kendal Loewen, St. Paul College
 - (Greg Mulcahy, President)
 - (Warren Sheaffer, St. Paul College)
- **MSCSA**
 - (Scott Formo, President)
 - Jason Fossum, Director, Government Relations
- **MSUAASF**
 - Ed Bouffard, SCSU
 - Leo Morgan, BSU
- **MSUSA**
 - Kelly Asche, Organizing Director
 - (Kara Brockett, State Chair)
- **ASA**
 - (Lisa Erwin, BSU)
 - (Irene Kovala, MCTC)
 - Mike Lopez, OOC
 - John O'Brien, Century College
 - Patrick Opatz, OOC
- **Finance**
 - Mike Nordby, OOC
 - Jeff Stierlen, OCC
 - Dave Thorn, WSU
 - Christina Vopatek, Central Lakes College
- **HR**
 - Sue Appelquist, North Hennepin CC
 - Heather Kidd, OOC
 - Annie Salner, St. Cloud TC
 - Johanna Simpson, MSU Mankato
- **ITS**
 - Joanne Chabot, OOC
 - Mark Peterson, Inver Hills CC
 - Bev Schuft, OOC
 - Kristi Tornquist, SCSU

() unable to attend

Slide 2



Objectives of the Initial Meeting

- Provide an overview to the CAG of:
 - The 2006 long range IT strategic investment plan
 - The background and origin of the current biennium legislative ITS funding request
 - FY07 and FY08 accomplishments
 - Preliminary FY09 planning
 - Revised process
 - High level review of proposed initiatives

Slide 3



Results

- Solid participation and lively discussion on all topics
 - Many diverse viewpoints across the student, faculty and campus representatives
 - However, feedback indicated that individuals appreciated hearing the perspectives from different stakeholder groups
 - Intense discussions on some topics which involved conflicting opinions between faculty representatives and student representatives
 - Participants view the CAG as an opportunity to have input and influence the EIC process / decisions
- True consensus reached on recommendations to EIC
 - Identified additional questions to be answered and outstanding issues to be addressed
- Significant feedback and suggestions on how to improve the process
 - Responsibility is now shared with this group to become and remain involved

Slide 4



Results

- Desire an allocation of project funds to complete the “smaller things” in each of the following categories:
 - Faculty
 - Students
 - Administration
 - Staff

Slide 5



Results

- Near the end of the meeting, there was a revelation
 - This group would like to identify projects and ask the EIC to direct the development of business cases for these projects
- Group is cautiously optimistic that they will be heard and can have an impact
 - These meetings alone do not represent faculty, student and staff input, but can be a path in that direction

Slide 6



Expectations

- PMO will take the feedback provided and deliver to the EIC
- EIC will receive and acknowledge the feedback, and provide a response
 - Confirm agreement
 - Explain why a different decision / path was taken
- PMO will deliver feedback to the CAG

Slide 7



When do we Know the Process Works?

- “CAG wants to see that their comments can influence EIC decisions”
- “When the EIC kills a project mid-stream or doesn’t provide the next gate of funding based on CAG recommendations”
- “When the EIC allocates no additional funding because the business cases presented don’t merit it”

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