Committee: Finance, Facilities and Technology   Date of Meeting: January 19, 2010

Agenda Item: Update on Enterprise Technology Investment Plan

☐ Proposed Policy Action  ☐ Approval Required by Policy  ☐ Other Approvals  ☐ Monitoring

☒ Information

Cite policy requirement, or explain why item is on the Board agenda: The Committee has assumed oversight of the IT Division. This report is intended to be the first of periodic updates of the work of the division.

Scheduled Presenter(s): Carolyn Parnell, Interim Vice Chancellor for Information Technology – Chief Information Officer

Outline of Key Points/Policy Issues: Interim Vice Chancellor Parnell will present a review of the current status of the information technology division’s investments 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 challenges.
BACKGROUND

In 2006, Minnesota State Colleges and Universities leadership recognized the need to develop a long-term strategy for IT investments. An objective, third-party assessment recommended an investment plan which resulted in the development of the “2006 ITS Investment Strategy Report”. The report was the basis for the FY08-FY09 Legislative funding request which garnered wide support from students, faculty and staff.

Under the auspices of the Enterprise Investment Committee the legislative appropriation has been used to strengthen the technology network foundation, enhance local campus networks and wireless networks, improve security and identity management and upgrade and expand online services to all users. The system has invested in the replacement of aging technology infrastructure; the hiring staff with sophisticated IT skills to re-engineer networks and tools; and improving campus technology infrastructure.

The report is intended to provide an update of the division’s work. Committee discussion is invited.

Date Presented to the Board: January 20, 2010
ITS Review 2009

Approach to Campus Collaboration and Communication

- Measurement
- Transparency
- Accountability

A Deliberate, Planned Solution

- In 2006, MnSCU leadership recognized the need to develop a long-term strategy for IT investments
- Obtained an objective, third-party assessment and recommended investment plan
- Resulted in the development of the “2006 ITS Investment Strategy Report”
  - Fed into the operating budget development process
  - Basis for the FY08-FY09 Legislative funding request
- Garnered wide support from students, faculty and staff
- Approved by Board and Presidents
Benchmarks

- In FY2006 MnSCU enterprise level IT spending lagged comparable institutions

<table>
<thead>
<tr>
<th></th>
<th>FY2006 MnSCU</th>
<th>FY2006 Average of 5 Other Institutions</th>
<th>FY2010 MnSCU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campuses</td>
<td>53</td>
<td>9</td>
<td>54</td>
</tr>
<tr>
<td>Student Headcount</td>
<td>373,115</td>
<td>93,354</td>
<td>382,061</td>
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<tr>
<td>Total Operation Budget</td>
<td>$1.4B</td>
<td>$2.2B</td>
<td>$1.8B</td>
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<tr>
<td>Enterprise Level IT Expenditures</td>
<td>$17.7M</td>
<td>$21.8M</td>
<td>$36.8M</td>
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<tr>
<td>% of Total Operating Budget</td>
<td>1.3%</td>
<td>1.25%</td>
<td>1.94%</td>
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<tr>
<td>$ Per Student</td>
<td>$47</td>
<td>$793</td>
<td>$96</td>
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<tr>
<td>$ Per Campus</td>
<td>$0.32M</td>
<td>$4.9M</td>
<td>$0.68M</td>
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</table>

Source: 2006 Enterprise and Campus IT Investment Survey of Selected Higher Education Systems

Recommended IT Investment Strategy

- From the 2006 IT Investment Strategy Report

- Accelerate Enhancement, Expansion, and Integration of Enterprise Systems
- Achieve and Sustain High Levels of System Availability, Data Security, and User Support
- Improve MnSCU-Wide Efficiency in Using Available IT Resources

FY06 Funding $20M
(FY02-05 Average: $17.7M)
Legislative Request

Four Major Goals:
- Provide easy and reliable access to the technology network and tools, including round-the-clock availability for students, faculty and staff
- Significantly enhance protection against security breaches
- Modernize software for student records, finance and human resources to streamline access and provide up-to-date functionality
- Make it easier and faster for students, faculty and staff to complete computer-related tasks

Through:
- Strengthening technology network foundation
- Enhancing local campus networks and wireless networks
- Improving security and identity management
- Upgrading and expanding online services to all users

By Investing In:
- Replacement of aging technology infrastructure
- Hiring staff with sophisticated IT skills to re-engineer networks and tools
- Improving campus technology infrastructure

Enterprise Technology Funding

<table>
<thead>
<tr>
<th>Year</th>
<th>Legislative Appropriation</th>
<th>Initiative Money</th>
<th>Budget Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>$1.0</td>
<td>$1.0</td>
<td>$16.4</td>
</tr>
<tr>
<td>FY01</td>
<td>$1.6</td>
<td>$1.6</td>
<td>$18.7</td>
</tr>
<tr>
<td>FY02</td>
<td>$18.1</td>
<td>$18.1</td>
<td>$25.3</td>
</tr>
<tr>
<td>FY03</td>
<td>$17.7</td>
<td>$17.7</td>
<td>$28.7</td>
</tr>
<tr>
<td>FY04</td>
<td>$13.3</td>
<td>$13.3</td>
<td>$30.0</td>
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<tr>
<td>FY05</td>
<td>$18.7</td>
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<td>$32.0</td>
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<td>FY06</td>
<td>$18.2</td>
<td>$18.2</td>
<td>$32.0</td>
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<td>FY07</td>
<td>$34.5</td>
<td>$34.5</td>
<td>$32.0</td>
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<tr>
<td>FY08</td>
<td>$38.2</td>
<td>$38.2</td>
<td>$32.0</td>
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<tr>
<td>FY09</td>
<td>$14.8</td>
<td>$14.8</td>
<td>$32.0</td>
</tr>
<tr>
<td>FY10</td>
<td>$18.3</td>
<td>$18.3</td>
<td>$30.0</td>
</tr>
</tbody>
</table>

Excludes the following:
- FY08 - $5.0 MM to campuses
- FY09 - $7.5 MM to campuses
- FY10 - $5.3 MM to campuses
- Reflects FY09 budget cut of $5MM

"Keep the Lights On" Operating Costs $31MM
The Enterprise Investment Management Process

Full Leadership Council

Endorsed Prioritized List of Enterprise Initiatives

Reviewed Prioritized List of Enterprise Initiatives

Recommended Prioritization of Enterprise Initiatives

Cross-functional Advisory Group

Finance & Administration

LC ASA Committee

LC IT Committee

LC Finance Committee

Chancellor

With periodic updates to Board

Enterprise Investment Committee

New group, meets quarterly

- 4 Sr. Vice Chancellor/Vice Chancellors
- 5 College/University Presidents

Recommended Prioritization of Enterprise Initiatives

Reviewed Prioritized List of Enterprise Initiatives

LC Finance Committee

LC ASA Committee

LC HR Committee

LC IT Committee

Feedback from meeting

Prioritized Initiatives

Cross-functional Advisory Group

Group reviews proposed business cases, then provides advice and recommendations. Comprised of students, faculty, campus staff, and channel reps.

Students, Faculty & Staff Innovation

Enterprise-wide Enablement

Core Infrastructure

Completed Projects – 2007-2009

"Establishing a strong technology foundation to build upon"

- Dismissal transfer for S. Students
- EROS
- ICIC Damage Module
- CPS Incident
- Affidavit
- Testing and Simulation Development
- Cybersecurity and Learning eats Development
- State Business Solutions
- WRT KAP Policy, Timeline, Last Date of Attendance, Satisfactory Academic Progress
- Office of Athletics and Development
- Student Housing
- Student Housing Module Rewrite
- Farm and Small Business Management Work Sites
- Star AFS
- Faculty Leadership
- Faculty & Medical Resource Fields
- SIRCO Core – Data
- eTranscript
- SAP Readiness Program
- Access & Security for Campus Technical Staff
- Access & Security for Campus Technical Staff
- PCEIS Standards

- HDG
- Refine and track IT governance
- Update Enterprise Data Center
- Student Housing Module Rewrite
- Farm and Small Business Management Work Sites
- Star AFS
- Faculty Leadership
- Faculty & Medical Resource Fields
- SIRCO Core – Data
- eTranscript
- SAP Readiness Program
- Access & Security for Campus Technical Staff
- Access & Security for Campus Technical Staff
- PCEIS Standards

- RIT
- Reporting Enhancements for Campuses
- Budget Module Phase 1 & 2
- eTranscripts
- Reporting Enhancements for Campuses
- Academic Training
- eTranscript, Development, and Support Web Site
- Support: Lister, Residence and Simuline Management
- Total Compensation Module
- Compensation and Compensation
- Cost Accounting
- Cost Accounting
- OA Spending Database
- Web App Security Policy

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Enterprise Technology Staff

# Staff

- Vacant / Open
- Filled

Note: Staffing numbers reflect levels at the beginning of the fiscal year, unless otherwise noted.

As of 12/23/09

ITS Metrics Comparison FY2000 – FY2010

- Lines of ISRS Programming Code: 68% Increase
- Critical Function Central Servers: 723% Increase
- Network Bandwidth (in Megabits per second): 4,900% Increase
- Network Hardware Devices: 430% Increase
- Servers with 24/7 Operations: 900% Increase
- Enterprise Software Applications: 233% Increase
- Production Database Rows of Data: 375% Increase
- ITS Staff Positions: 32% Increase
EIC Approved Work Plan FY2010

<table>
<thead>
<tr>
<th>Project</th>
<th>Funding Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Analytics</td>
<td>$215,000</td>
</tr>
<tr>
<td>Identity and Access Management</td>
<td>$800,000</td>
</tr>
<tr>
<td>Secondary Data Center</td>
<td>$750,000</td>
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<tr>
<td>Security Program</td>
<td>$500,000</td>
</tr>
<tr>
<td>Students First</td>
<td>$1,500,000</td>
</tr>
<tr>
<td><strong>Total FY10 Enterprise ITS Investment Funding</strong></td>
<td><strong>$3,765,000</strong></td>
</tr>
</tbody>
</table>

ISRS Features

- One of the largest single higher education databases in the country
- 1.7 billion rows of data
- Handles up to 50,000 simultaneous queries per second
- Processes more than 100,000 transactions per hour
- Manages a database of information on more than 6 million unique persons
- Processes over 27 million financial transactions each year
- Produces the payroll for 22,000 student employees and manages the HR/Payroll for 45,000 employees
- Runs more than 1000 user defined jobs each night
- Manages set up and registration for more than 3 million courses each academic year
- Processes hundreds of millions of dollars in student tuition and fee payments
- Processes $169,000,000 in credit card payments each year
- Distributes more than $941,565,000 to students for scholarships, loans and aid
- "Serves up" 2 million web application pages in a single day
- Produces almost 12,000 reports per day for ISRS users during prime time alone, and over a quarter million report and batch jobs each month
- Produces 247,000 1098s in a typical year
- Accounts for 28.5 billion dollars of financial activity in a year
ISRS Modules

- Prospective Inquiry
- Application
- Admissions
- Registration
- Student Housing
- Assessment/Test Scores
- Disability Services
- Transcript
- Grades
- Curriculum
- Financial Aid
- Accounting
- Budgeting
- Financial Reporting
- Purchasing
- Payroll
- Cost Allocation
- Equipment/Fixed Assets
- Inventory
- Assets
- Accounts Payable
- Direct Deposit
- Check Writing
- Accounts Receivable
- Collections
- Online Payment
- Payment Plan Interface
- Prepayments
- Third Party Billing
- Tuition Waiver
- Timesheet
- HR Licensure
- HR

Current ITS Budget

<table>
<thead>
<tr>
<th>Services</th>
<th>Total Expenses 2009</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct to Students</td>
<td>$11,289,884</td>
<td>25.21%</td>
</tr>
<tr>
<td>System Office (OOC)</td>
<td>$3,677,830</td>
<td>8.21%</td>
</tr>
<tr>
<td>Institutions/Campuses</td>
<td>$26,626,032</td>
<td>59.45%</td>
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<tr>
<td>State of MN</td>
<td>$426,594</td>
<td>.95%</td>
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<tr>
<td>Beyond Students</td>
<td>$2,768,002</td>
<td>6.18%</td>
</tr>
<tr>
<td>Totals</td>
<td>$44,788.345</td>
<td>100%</td>
</tr>
</tbody>
</table>
ITS 2009 KDV Security Audit

Finding:
• Significant deficiencies leading to material weakness due to inaction on prior audit items

Plan for Resolution:
• Assign responsibility for each prior finding (completed)
• Rigorous review monthly with accountability for action plan and time to resolution
• Written progress report to the Chancellor monthly

Looking Forward – FY11
• Cognizant of current economic environment and ongoing budget constraints
• Continuing pressure from Legislature and Board to further improve efficiency and effectiveness of operations
• Continue to implement solutions that benefit students, faculty and staff
• Continue measurement, transparency, accountability
Looking Forward – FY11

Strengths:
• Key technical infrastructure improvements have now positioned the organization to undertake projects that will provide even greater benefits to students, faculty, staff
• More appropriate staffing and accompanying skill-set upgrades
• Broad support for FY2011 Work Plan and Students First

Challenges:
• Budget constraints and reduction
• Demand continues to escalate – both in quantity of requests and size of scope
• Competing demands for resources
• Delivery and support of new services directly impact the ongoing ITS budget
• The cost to ‘keep the lights on’ will increase every year (currently $31M)