

# Technology Master Plan

**2011-2014**



# M|State

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Community and Technical College



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## Executive Summary

Information and instructional technologies are now considered essential components to fulfill the mission of a college. Technology is changing how we access, organize, analyze, and process information. It is considered instrumental for improving information exchange, enhancing teaching and learning, and increasing productivity. Technology is conceptually changing how we conduct business and how we communicate. Technology's influence, impact, and presence are reshaping our society, our commerce, our work life, our leisure life, and our education.

The growth and expansion of technology brings continuous change. Planning for technology is difficult when the landscape changes every day. However, an organization needs to determine strategic goals that shape tactical plans and approaches as it explores, evaluates, selects, implements, and leverages technology. This Technology Master Plan was developed to outline the college's technology strategic goals and major initiatives for technology at M State.

The development of the Minnesota State Community and Technical College Technology Master Plan for 2011 – 2014 involved the participation of groups from throughout the college, including Campus Leadership Teams (designated to be the campus technology committee), the Information Technology Services (ITS) Department, the Student Technology Fee Committee, the College Leadership Team and President's Cabinet. The plan incorporates information from the college strategic and facilities plans, as well as the MnSCU Board's strategic directions and the MnSCU ITS Division strategic directions.

The success of the technology master plan is dependent on a number of factors, but most importantly on "buy-in" from the college community as a whole. The process followed to develop this plan made every effort to encourage broad feedback and input into the plan. This document is intended to be both visionary and actionable, touching all areas of teaching and learning technology at Minnesota State Community and Technical College.

## Planning Alignment and Integration

The Minnesota State Community and Technical College (M State) 2011-2014 Technology Master Plan was developed by identifying initiatives that align with the Strategic Framework for Minnesota State Colleges and Universities and M State's 2012 – 2017 Strategic and Facilities Master Plans.

### **Strategic Framework for Minnesota State Colleges and Universities**

Minnesota State Colleges and Universities play an essential role in growing Minnesota's economy and opening the doors of educational opportunity to all Minnesotans. To that end, we will:

#### **1. Ensure access to an extraordinary education for all Minnesotans**

- Our faculty and staff will provide the best education available in Minnesota, preparing graduates to lead in every sector of Minnesota's economy.
- We will continue to be the place of opportunity, making education accessible to all Minnesotans who seek a college, technical or university education; those who want to update their skills; and those who need to prepare for new careers.

#### **2. Be the partner of choice to meet Minnesota's workforce and community needs**

- Our colleges and universities will be the partner of choice for businesses and communities across Minnesota to help them solve real-world problems and keep Minnesotans at the leading edge of their professions.
- Our faculty and staff will enable Minnesota to meet its need for a substantially better educated workforce by increasing the number of Minnesotans who complete certificates, diplomas and degrees.

#### **3. Deliver to students, employers, communities and taxpayers the highest value / most affordable option**

- Our colleges and universities will deliver the highest value to students, employers, communities and taxpayers.
- We will be the highest value / most affordable higher education option.



## **Minnesota State Community and Technical College Strategic Plan 2012 – 2017**

The 2012 – 2017 Minnesota State Community and Technical College Strategic Plan identifies mission and vision statements, values and goals:

### **Mission**

Providing dynamic Learning for living, working, and serving!

### **Vision**

A success story for every student and stakeholder.

**M State is focused on excellence, integrity, respect and innovation.**

### **Values**

- Excellence in teaching and service
- An environment conducive to learning and working
- A culture of diversity and inclusiveness
- Responsiveness to communities served
- Respect and civility in communications
- Openness to innovation and change
- Accountability and transparency in decision making

### **M State Strategic Goals**

M State's goals align with the Strategic Framework of the Minnesota State Colleges and Universities System (MnSCU).

### **MnSCU Strategic Direction 1: Ensure access to an extraordinary education for all Minnesotans.**

M State embraces the challenge to excel in teaching, learning, and service so all students - career, transfer, and life-long learners- are ensured of opportunities for success.

### **M State Strategies:**

- Focus on holistic solutions for increasing student persistence and completion rates.
- Work with area high schools to better prepare students for success.
- Strive for a student population that reflects the demographical ethnicity of the region
- Provide high-quality and appropriate educational options to a changing population.
- Implement innovative pedagogies to improve student success.
- Continuously improve the measurement and assessment of student learning.

### **MnSCU Strategic Direction 2: Achieve high-quality learning through a commitment to academic excellence and accountability**

**M State aspires to excellence in teaching, learning, and service to all career, transfer, and life-long learning students.**

**M State Goals and Strategies:**

- Provide high-quality and appropriate educational options to a changing population.
- Improve student success in developmental math, reading, and writing.
- Continuously improve the processes for the assessment of student learning.
- Re-examine current program delivery methods to ensure we are meeting the needs of our students and communities.
- Take deliberate steps to build a culture that fully demonstrates the college's established values.

**MnSCU Strategic Direction 3: Provide learning opportunities, programs and services to enhance the global economic competitiveness of the state, its regions and its people**

**M State recognizes its role as a leader in preparing our students, the region, and the state for current and future economic competitiveness in a global market.**

**M State Goals:**

- Continue commitment to the arts and culture in curriculum and community activities.
- Be a regional leader in workforce education, partnerships, and training.

**MnSCU Strategic Direction 4: Innovate to meet current and future educational needs**

**M State continually assesses how to productively meet current and future educational needs through innovation, efficiencies, and shared services.**

**M State Goals:**

- Create efficiencies and innovation through the effective use of technology, partnerships, and employee talent.
- Identify and share best practices regarding innovation, assessment, efficiencies, and shared services within the college.
- Offer ongoing development opportunities for faculty and staff to enhance their knowledge, skills, and abilities to educate and serve students.
- Continue development of a web based curriculum process to facilitate continuous improvement of curriculum.
- Improve efficiencies by use of electronic and virtual systems and technologies.

**MnSCU Strategic Direction 5: Sustain financial viability during changing economic and market conditions**

**M State uses sound financial management and assessment processes to ensure its long-term fiscal viability.**

**M State Goals:**

- Explore and develop new revenue streams
- Reduce unnecessary duplication and develop a more efficient infrastructure.
- Develop a budget process that drives funding toward strategic plan priorities.

## Information Technology Guiding Principles

The Technology Master Plan provides direction and a vision for the future of technology at Minnesota State Community and Technical College. M State is committed to investing in technology to support its mission, and to creating an environment that embraces diversity and innovation.

The role of the Information Technology Services Department referred to in this document is to support and enhance the core mission of education and service through the effective management and use of information resources.

The Guiding Principles for Information Technology Services are as follows:

1. ITS must support the institution's mission, including all operational areas of the institution.
2. ITS will meet the highest standards of ethics, excellence and leadership, providing an environment that enriches and enhances all teaching and learning activities.
3. ITS will provide a reliable, flexible, current and secure technology infrastructure.
4. ITS will optimize technical support resources and services for all members of the community.
5. ITS will support decision-making processes to ensure that priorities and funding decisions are aligned with the College and MnSCU missions and ITS goals and objectives.
6. ITS will support initiatives that focus on exemplary, timely and accurate customer service that proactively responds to the needs of customers.
7. ITS is committed to efficient, productive, and effective continuous improvement in services and resources.

These principles will require a shared commitment among faculty, staff and administrators to seek more effective ways of using information technology resources to achieve College goals, to set clear priorities and initiatives for ITS and to work collaboratively to achieve the identified goals.

## Information Technology Strategic Goals

### **1. Deliver comprehensive technology support to students, faculty and staff.**

The needs of students, faculty and staff drive the objectives of the ITS Department. ITS is committed to developing and supporting technology solutions that aid the College in meeting these needs in effective and efficient ways. ITS has assumed a leadership role in the ongoing evaluation of existing services and technology. Planned exploration of new technologies will enhance these services.

Strategies include:

- Ensure that college technology needs are met in a timely and efficient manner;
- Recognize and respond to end user needs;
- Provide training that assists users in integrating technology into their teaching, learning, and work environments;
- Promote innovative technology solutions throughout all areas of the college by researching and applying new technology;
- Maintain a position as a technology leader and mentor to peer institutions;
- Implement technology infrastructure and applications that provide educational access to diverse groups;
- Measure, track, communicate and continuously improve organizational performance in order to meet, exceed and enhance customer service.

### **2. Embrace innovation and new technology while maintaining a solid, reliable technology infrastructure.**

Technology advancements are occurring at increasingly faster rates of discovery and implementation; technology that is implemented today is out-of-date tomorrow. The College requires ITS to balance (within the fiscal constraints of the ITS budget) the demands to implement state-of-the-industry technology and to maintain existing infrastructure.

Strategies include:

- Provide students with state-of-the-art technology that enhances their academic experience and prepares them for future careers;
- Develop and maintain a robust, state of the art and best in-class web site for the College, including web-based applications and databases;
- Integrate web services across the College's operations, including the development of student and faculty/staff portals;
- Provide faculty with the technology tools and instructional technology services to support and extend the learning environment, including support for the instructional management system;
- Maintain a stable rotation of laptop and desktop computers for faculty and staff;
- Maintain a stable rotation of computers for lab environments;



- Maintain a stable rotation of projectors and audio/screen equipment for classrooms and conference rooms. Install and maintain classroom and conference room SMART Board interactive whiteboards and LCD monitors where applicable;
- Provide staff with the programs and technology to achieve timely and efficient day-to-day operations;
- Research advancements in infrastructure technologies to ensure on and off-campus access to college services and other information resources;
- Research advancements in learning technologies to ensure course environments support learning;
- Pursue technology that improves employee communication;
- Continue to make the necessary infrastructure improvements (server, voice and data networks) that provide access to College technology services for all employees;
- Adapt to developments in the data, video and voice convergence arenas by making the necessary infrastructure and human resource adjustments.

### **3. Provide effective technology leadership, planning, and cost management.**

The use of technology at M State varies considerably from college initiatives to campus/departmental and individual needs. ITS provides leadership and support to meet the demands of the College by creating a balance between centralized standards and policies and unrestricted adoptions of technology. Effective planning and cost management can address the needs of students, faculty and staff, and provide appropriate returns on the investment. ITS plays a critical role in the design and development of new College facilities, e-learning environments, technology infrastructure, and in the implementation of new and existing academic programs.

Strategies include:

- Promote clear and comprehensive policies, procedures and guidelines that advance responsible management of technology and support operations;
- Create and implement standards and guidelines that improve the efficiency, availability and reliability of ITS;
- Promote change processes throughout the College that maintain M State's status as a leader in technological advancement and innovation among community and technical colleges;
- Ensure that appropriate ITS staff members are included in all College construction bonding and repair and replacement projects;
- Provide project management leadership that identifies, prioritizes and funds technology projects;
- Foster partnerships with internal and external groups to enhance IT services, knowledge and efficiency;
- Provide technology services to other MnSCU institutions as a shared service where applicable and where such sharing does not compromise or minimize service to students and/or other constituents;

- Continue to improve large technology equipment replacement processes that reflect the ongoing, cyclical costs of technology;
- Collect detailed cost and usage statistics to assist in analyzing technology costs and benefits;
- Create a communication plan so that students, faculty and staff are informed about the technology resources provided by the College and the System Office ITS Division.

#### **4. Develop, test and update Disaster Recovery, Contingency Planning and Emergency Preparedness plans.**

Risk management, disaster recovery, business continuity and information security are critical components of M State's strategic and technology planning efforts. Technology is a driving force in positioning M State as an innovative community and technical college leader, and that technology must both protect and secure the safety, the resources and the reputation of the College.

Strategies include:

- Monitor and secure administrative systems to comply with existing, new and updated state and federal laws and regulations;
- Develop policies and procedures related to Internet security and information privacy;
- Develop plans and initiate actions to provide adequate information security for networks, systems and information facilities to include:
  - ITS Information Security Plan
  - All Hazards Plan
    - Disaster Recovery/Continuity of Operations Plan
    - Emergency Preparedness Plan
    - Emergency Notification Systems

## Major Technology Initiatives

(Ranking order does not signify priority)

### 1. Instructional Design/Development

Beginning spring 2011, M State has hired an Instructional Design/Development Coordinator. This coordinator will provide consultations and professional development services designed to improve and maintain the success of faculty with the design, development and delivery of various forms of instruction for students. This will include, but is not limited to, guidance and workshops about pedagogical practices and instructional technology applications.

The main responsibilities of this position are to:

- Provide collaborative project management with M State faculty and staff for the development and production of quality eCampus, blended and face-to-face courses.
- Manage the creation and delivery of training sessions for faculty and staff and evaluate the training sessions (faculty, student and staff).

ITS will be a technology resource for instructional design and development. ITS implements several technology solutions for faculty and staff and it will be important for both ITS and the Instructional Design Coordinator to work together on training and other technology-related matters. For example, ITS will assist in the selection of new software, vendor contracts, and funding for technology solutions.

### 2. New Server and Data Storage Architecture Deployment

ITS currently utilizes approximately 70 servers across the college for many resources, including email, file, print, bookstore POS (Point-of-Sale), backups, telephony and many more. ITS will work to replace existing Gateway servers with Dell servers. ITS will also begin mapping out a strategy for server virtualization that will reduce the number of physical servers and create efficiencies.

ITS has implemented Dell EqualLogic storage area network (SAN) systems for our data storage needs. These Dell SANs combine intelligence and automation with fault tolerance to provide simplified administration, rapid deployment, enterprise performance and reliability, and seamless scalability. These SAN units have been deployed strategically on campuses and will be used for most data storage needs, including email, files and databases. The ultimate goal of these SAN units is to provide quick recovery of systems when necessary. ITS will continue to maintain and enhance the use of our SAN systems.

### 3. Improved Wireless Infrastructure

In an ever-growing technology arena, wireless networking technologies are becoming a crucial component of a campus network. Growing up in a wireless world, today's

students expect “anywhere, anytime” access to whatever information they need, on whatever device is in their hands. Our college must determine how to cost-effectively provide dependable, high-speed wireless access to meet the needs of our students, faculty and staff. For ITS, wireless deployments and enhancements are a top priority.

ITS has over 100 wireless access points installed across the college that provide wireless connectivity. ITS will invest heavily in the most updated wireless Cisco technology to make sure that connectivity is secure, dependable and ubiquitous.

#### 4. Campus Video Surveillance

To provide improved security on all campuses, ITS will implement a plan for installing indoor and outdoor video surveillance cameras, with recording capabilities. Indoor cameras will be placed in hallways and other high-security areas. No cameras will be installed in classrooms. Outdoor cameras will focus on parking lot areas and walkways.

#### 5. Campus Digital Signage

Digital Signage can be a very effective campus communications system. Near the student service offices, signage provides scheduled campus announcements: the last day to add or drop a course; the next deadlines for financial aid and valuable information about registration. Important announcements such as facility issues, special schedules, or emergency messaging can be immediately and simultaneously posted to every location.

A network of digital signage can be effectively used to coordinate content and delivery, providing a valuable aggregate effect that becomes a campus information system delivering relevant content – in the right place at the right time to the right audience – that will absolutely be noticed.

ITS will implement digital signage on all campuses. This project is completed on the Moorhead campus and the other three campuses will be completed by June 30, 2011. Moorhead’s North Campus will also have digital signage installed during fiscal year 2012.

#### 6. Telecommunications Improvements

In an effort to reduce maintenance and upgrade costs to our current voice communication systems at our college, ITS will migrate the college to a new and improved voice communication system. This Cisco IP system will provide redundant call manager systems for all campuses and the Perham Service Center, including voicemail and instant messaging systems, improved 911 emergency responder systems, and a full Contact (Call) Center systems environment. All calls between the campuses and service center can be made through 4-digit dialing and are toll-free. All phones on campuses will be replaced with new Cisco phones and communications software (instant messaging, voicemail) will be installed on all faculty and staff computers.

Cisco is the worldwide leader of networking equipment and network management for the Internet and for the enterprise. By adopting a Cisco IP-based communications system, we can take advantage of their investments in routing, switching, security, and IP telephony, and lay the foundation for enhanced rich-media based collaboration.

## 7. Computer and Projector Rotation Plans

ITS and college leadership has implemented a desktop and laptop computer rotation plan that ensures we provide up-to-date computer technology for our faculty and staff. Our computer rotation plan executes a replacement cycle of approximately four years. This does not necessarily mean that everyone receives a new computer every four years. It may be necessary for some employees to receive a new computer every two to three years in order to satisfy software and hardware requirements for their academic program or administrative need. Assignments of computers are based on several situations, including software and hardware requirements, the number of assigned courses, and the need to have a college computer. Assignments of computers to adjunct instructors are based on the discretion of the academic dean. Funding of the computer rotation plan for faculty and staff computers comes from the College Equipment Budget and is reviewed annually by the College deans and President's Cabinet. ITS leadership is responsible for updating and presenting the computer rotation plan to these college leadership groups annually.

ITS has implemented a classroom and conference room projector rotation plan. Our projector rotation plan executes a replacement cycle of approximately four years. Funding of the projector rotation plan comes from the ITS budget and is reviewed annually by ITS leadership.

## 8. Improved Videoconferencing for Classrooms and Conference Rooms

M State has always been a leader in providing courses to students via traditional videoconferencing or interactive television (ITV). In our multi-campus environment, an instructor may be located on one campus, but we offer the same course to all campuses via ITV. We also hold several administrative and academic meetings over videoconferencing throughout the year.

ITS has committed to researching ways to improve this videoconferencing. One solution might be telepresence videoconferencing, which is a higher level of videotelephony that deploys greater technical sophistication and improved fidelity of both video and audio than traditional videoconferencing. This technology would improve the quality of the students' educational experience and the quality of administrative and academic college meetings held over videoconferencing.

ITS will continue to research better solutions for videoconferencing.



## 9. Web Application Development

For the past three years, Web Services has focused on two main areas of development. First, they developed a robust Web Content Management System (WCMS) for the college website. The WCMS is a software system that provides website authoring, collaboration, and administration tools designed to allow users with little knowledge of web programming languages or markup languages to create and manage website content with relative ease. We use a database to store page content and other information that might be needed by the system.

Secondly, Web Services focused on several web-based applications that were developed in an effort to leverage technology and create self-sufficient users. Many of these applications will continue in development over the next 12-24 months. Short descriptions of these applications include the following:

- Curriculum Approval & Review Process (CARP) System. CARP allows any employee in the college to propose new or improved curriculum, from individual courses to whole programs, and allows everyone to discuss the proposal in a web-based software application. All the input is funneled to one of three decision making bodies – AASC (Academic Affairs & Standards Committee), the President's Cabinet, and the Curriculum Technician responsible for state compliance. A proposal can go from a good idea to a scheduled course in less than six weeks. CARP development will continue through August 2012.
- Advisor Access Portal. This web-based portal software allows staff and faculty who advise students to electronically store and share advising information. The "Advisor Access" portal also creates a holistic advising environment, meaning that students, faculty, and advisors have 24/7 access to communicate collaboratively, regardless of their location or schedules.
- Employee Portal. This portal will be developed with the concept of having one place to go for most employee electronic resources, including web-access email, D2L, E-timesheet, E-services and CARP. Voicemail retrieval may also be developed in to the portal. All these resources will be available through a web portal with single sign-on authentication. With the use of StarID and password, employees will log in to this portal. The projected release for this system is August 2012, with continued enhancements scheduled through 2014 and beyond.
- Student Portal, SpartanNet. SpartanNet is already available to our students and is a single sign-on portal with access to student email (Gmail), E-services and D2L. Additional information is also provided to students in this portal, including printing and available software downloads. Specific messages are often delivered to our students through the portal. SpartanNet is scheduled for an updated version release prior to Fall semester 2012, with continued enhancements scheduled through 2014 and beyond.

- Center for College Readiness (CCR) Website,  
<https://www.centerforcollegereadiness.org>. The Center for College Readiness provides college preparatory support services and resources to junior high school and high school teachers and students. There are five dynamic programs under the online umbrella of the CCR, including Ready or Not Writing, Ready or Not Reading, Step Write Up, Science Works and Math Works. Web Services is hosting this website and is working to develop specific web pages for each of these programs under the CCR website. This project is 100% grant funded and is contingent on future funding from the Minnesota Legislature. Development of this website will continue through fiscal year 2012.

The CCR recently added a staff member to develop 3-dimensional interactive computer models to supplement math, reading, writing and science programming. The CCR will utilize high school and college faculty expertise to assist the developer in creating interactive 3-D learning objects for use by CCR participating students. The CCR will attempt to maximize model usage by designing objects that have application at both the high school and college level. This goal will also be of use in the project's goal of assisting to improve college readiness by exposing students to similar material as they may expect to encounter at the college level. This developer will utilize many software packages for this development, including EON Professional Software.

Web Services will also look at developing mobile applications that may meet the needs of our students and employees. Several other web-based applications will also need to be updated annually, including Online Orientation. Beginning mid to late 2012, Web Services and College Marketing will develop a plan to design a new website for the College.

## 10. Disaster Recovery and Contingency Planning

Disaster Recovery (DR) has always been important, but the natural disaster events faced by the college over the past few years has increased the awareness and highlighted the importance of this often overlooked business function. The loss of mission-critical systems can result in significant downtime of essential services and systems used by students and employees. Being able to recover systems quickly, accurately, and completely is critical to the ongoing success of any institution. ITS will work with other college departments to develop a comprehensive disaster recovery plan of technology services and systems for the College.

## 11. Cloud Computing

Cloud computing is simply this: the same stuff you do with your computer, such as office tasks or storing files, except done online. The term 'cloud computing' comes from the visual image of a cloud of data that floats out on the Internet, and which can be accessed from anywhere there is an Internet connection, on any computing device. An

example of M State already using cloud services is our migration to Google's Gmail service for student email.

Cloud computing is built for the world of tomorrow, where we each use many different kinds of computing devices: desktop, laptop, cell phone, or tablet. The intention is to make the functionality and data we need always accessible no matter where we are in the world, and no matter what we are using to access the Internet.

While cloud computing may save on future resources, there may be some downsides to this technology. Putting data into the cloud involves a lot of trust that the cloud provider will be able to protect our data. Also, cloud services tend to still be at a primitive stage compared to equivalents on a desktop or laptop computer.

ITS will continue to research cloud computing and implement this technology where appropriate.

## 12. Security

M State information technology resources are valuable assets that the College has the right and the obligation to manage, protect, secure and control. College employees, students, suppliers and other affiliates must use these resources for appropriate purposes only, protect access to them, and control them appropriately. Access to networks, computing systems, and electronic data owned or operated by M State is a privilege that entails responsibilities.

ITS will work with faculty, administration and college departments to develop an information technology security plan. This plan will be developed in accordance with current policies, procedures and guidelines established by the College and the MnSCU System Office. The security plan will address many issues, including the following and more:

- Data security, including public data versus private data
- Physical security, including hardware and server/switch rooms
- Password usage and handling
- Encryption of mobile computing and storage devices
- Data sanitization
- Information security incident response
- Security patch management
- Vulnerability scanning
- Anti-malware installation and management
- Payment Card Industry Data Security Standards (PCI DSS)

### **Other Important Technology Initiatives**

ITS has several other important technology initiatives under development, including the following:

1. **Printer Management Plan.** M State implemented a three phase plan to reduce college printing expenses. These phases include the elimination of free printing for students, controlled printing for faculty and staff, and the reduction of printers across the college. Phases one and two have been implemented; ITS and the College will continue to work on reducing the number of printers over the next several years.
2. **Human Resources Information System.** ITS will collaborate with College Human Resources to develop a system that ensures the successful onboard and off board of college employees. This will ensure that employees have the appropriate resources to do their job and to secure the resources of the college.
3. ITS is exploring opportunities to integrate e-reader and tablet technology into classrooms and other college business operations.

## Planning Considerations

In executing the M State Technology Master Plan initiatives, several planning considerations need to be reviewed, including funding, technology staffing, MnSCU technology initiatives, and technology changes.

### Funding

The majority of M State technology initiatives are funded by the student technology fee. The current rate for this fee is \$10.00 per credit. The maximum allowed by any MnSCU institution is \$10.00 per credit. The Technology Fee Committee (majority are students) meets annually to discuss technology initiatives and how technology fees are used to support technology.

Other sources of funding for technology initiatives come from the college general fund.

### Technology Staffing

To ensure the initiatives outlined in this plan are completed and that superior customer services are provided, it is necessary to maintain staffing levels in the Information Technology Services Department with highly skilled and qualified individuals. The ITS budget may include initiatives that allow for training of ITS staff on an ongoing basis to keep up with changing technology.

### MnSCU Technology Initiatives

The MnSCU ITS Division has many technology initiatives that will affect campus operations. M State has made the commitment to help with these initiatives in many ways, including piloting new systems and helping with policy and procedure changes. Some of the current MnSCU technology-related initiatives in progress over the next several years include:

- Student's First Initiative – A group of interdependent projects aimed at improving technology systems that will make it possible for a student to access system curriculum and resources more easily.
- Identity and Access Management – the coordination of policy, business needs, data and technology with the goal of developing a standardized system used to facilitate secure yet simplified access to all MnSCU affiliated technology systems so that MnSCU can provide the right access for the right people at the right time.

It is important to understand that the decisions for what is considered right -- whether it is the right access, the right people, or the right time -- are not decisions made by Identity and Access Management. Those decisions are made by the service providers to meet their business needs within the policy requirements. Identity and Access Management provides the mechanisms to determine if an individual is allowed to use a service or resource.

As part of MnSCU, the system Information Technology Division may have additional initiatives with which the campus must comply. Examples of recent MnSCU technology initiatives include:



PCI – DSS Card Industry Data Security Standards  
E-Timesheet System  
Emergency Notification System (Star Alert)

### **Technology Changes**

Technologies eventually (or sometimes very quickly) reach the limit of their performance and become obsolete. If demand for the product persists, a new technology will soon replace the old. The new technology usually performs better than the old; sometimes it performs at a lower level but is cheaper to produce and becomes attractive from a price perspective.

ITS must anticipate technology change and adjust to it in our planning. We will be much better prepared to accommodate our institution's needs if we track the major factors that affect technological change. As we plan for our technology initiatives, we will need to understand what is happening in higher education and in the world today that may affect what we do and how we do it over the next three years. Some of the areas to consider are:

- Limits of performance in current technology we use;
- Breakthrough technology on the verge of being introduced in the next year;
- Technology and devices in research and development that could be deployed within five years;
- Manufacturing capability and scalability of new technology;
- Economic climate;
- Changing needs of students

## Assessment

ITS will continue to work closely with the designated campus leadership teams, the President's Cabinet and the student Technology Fee Committee in technology planning and assessment. Beginning fall semester 2011, ITS will collaborate with the College Institutional Research Department to implement student and faculty/staff satisfaction surveys related to technology. Information obtained through these two evaluation initiatives will be integrated into on-going improvements in technology services, innovation and priorities.

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