



Information Technology Strategic Plan

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The Information Technology department will provide innovative, progressive technology to enable faculty, staff and students to have the best learning and working experience possible. As a versatile organization, Information Technology meets goals through continued exploration, implementation and refinement of technology while providing first-class customer service and support.....	
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OVERVIEW

Fitchburg State University has always emphasized the power of technology to enhance and enable learning, research and instruction. Some significant projects have included:

- The expansion and improvement of the Banner ERP system and digitization of documents to drive the operations of the University.
- Upgrade of the University core network infrastructure to include 10 gigabyte links between datacenters and 1 gigabyte links to each desktop.
- Installation of the first Voice-over-IP telephony system housed in the cloud.
- Installation of the University's first wireless system.
- Distance-learning instruction.
- Consolidation of the Information Technology workers into one department.
- Technical support for all University constituents with a 365x24x7 call center.
- Installation and setup of the University's first Intrusion Prevention System and email archive system.
- Installation of the first thin client systems in podiums and shared lab spaces.
- Creation of the first mobile-focused website for the University.
- Design and creation of the first remote classroom distance learning system.
- Creation of the information security office and campus security programs.
- Integration of data-mining decision systems to improve student retention and performance.

Fitchburg State University has made great strides in improving the overall technological environment on campus but the rapid pace of change, increased sophistication and integration of systems warrants that a single cohesive plan be developed to guide the University through future technological purchases and projects. This plan will ensure that Fitchburg State University maintains its competitive edge and able to provide a robust electronic environment to produce the best graduates possible.

How this plan was developed

This plan was developed collaboratively by with the first design based upon the vision statement, mission statement and guiding principles listed below. Other input came from suggestions developed during brainstorming sessions during a Technology annual planning event in August of 2009 and comparing this plan with other institution's plans across the U.S. This plan was also developed with input from the Fitchburg State University Strategic Plan developed by a cross-functional team in the fall of 2009 and updated in 2015.

This plan was initially reviewed and edited by the Technology manager's group, the IT department, the University's Executive Cabinet and the Technology Advisory Committee. Lastly, this plan has been reviewed and commented on by all members of the Fitchburg State community via the web.

Updates

This plan has been updated each year on a rolling basis since it was created. For legibility reasons, parts of it have been summarized or removed so that it can continue being an effective working document.

Information Technology Vision

The following vision represents the goals of the department's work and provides the framework and inspiration for the future. It answers the question, "Where do we want to go?"

The Technology department will be a recognized center of excellence that advances teaching, learning and innovation.

Information Technology Mission

The mission statement briefly describes our fundamental purpose. It answers the question, "Why do we exist?"

The Information Technology department will provide innovative, progressive technology to enable faculty, staff and students to have the best learning and working experience possible. As a versatile organization, Information Technology meets goals through continued exploration, implementation and refinement of technology while providing first-class customer service and support.

Information Technology Guiding Principles

These principles form our core tenets regarding information technology's role at Fitchburg State University.

1. Information Technology is a vital part of Fitchburg State University's academic and support mission by providing an effective environment for teaching, learning, research and achieving business goals.
 2. Information Technology enhances the creation and promotion of areas of excellence within Fitchburg State University. These areas of excellence often become a competitive advantage and can be leveraged to attract and retain the best faculty, staff and students.
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3. Information Technology must investigate, test and evaluate new technologies and leverage them to further advance its academic and support mission.
 4. Information Technology must appropriately balance:
 - a. Academic and administrative support.
 - b. Individual needs with University-wide needs.
 - c. Access to information with the security risk of the information.
 - d. Cutting-edge products and services with reliability and ability-to-implement.
 - e. Requests and desires with being a good steward of costs and ability to support.
 - f. Equipment usage versus environmental impact and costs.
 5. Information Technology must provide infrastructure and services that are useful, reliable, scalable, and secure.
 6. Information Technology must provide great customer service and communicate effectively.
 7. Information Technology must offer technologies that appeal to all our students, faculty and staff regardless of their location and mindful of their preferred method of working and learning.
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INFORMATION TECHNOLOGY GOALS AND OBJECTIVES

The strategic planning process identified five overarching goals and associated objectives. These goals provide the foundational direction of the department with the objectives forming the strategic initiatives supporting those goals.

GOAL 1: UPGRADE AND SIMPLIFY INFRASTRUCTURE

OBJECTIVE 1.1: INCREASE THE USE OF SYSTEM VIRTUALIZATION AND USE OF CLOUD SERVICES TO REDUCE COSTS AND SIMPLIFY HARDWARE PLATFORMS.

1.1.1 Virtualize servers as appropriate to reduce acquisition and secondary costs. **Status: Completed.**

1.1.2 Investigate the use of workstation virtualization to replace selected desktop systems on campus. **Status: Completed.**

1.1.3 Create virtual labs that will allow students to access applications on their own equipment. **Status: Completed.**

1.1.4 Utilize cloud services, when appropriate, to reduce costs, enhance performance and scalability of services offered and increase system uptime. **Status: In progress.**

1.1.5 Simplify the SSIDs used on campus to make it easier for users to connect properly. **Status: Completed.**

OBJECTIVE 1.2: STANDARDIZE AND AUTOMATE CONFIGURATIONS AND METHODOLOGIES

1.2.1 Automate account creation and de-provisioning for all users. **Status: Completed.**

1.2.2 Reduce the number of unique system configurations purchased and supported. **Status: Stopped.**

1.2.3 Automate the workstation imaging process. **Status: Completed.**

1.2.4 Deploy standardized phone handsets. **Status: Completed.**

1.2.5 Utilize a standardized platform for data interfacing to simplify support and secondary tech support. **Status: Completed.**

GOAL 2: COMMUNICATION AND TELECOM

OBJECTIVE 2.1: INVESTIGATE AND IMPLEMENT UNIFIED MESSAGING AND ITS IMPACT ON CAMPUS.

2.1.1: Implement an electronic faxing system integrated with Outlook for faculty/staff use.

Status: Stopped.

2.1.2: Implement unified voicemail integrated with email for faculty/staff use. Status: Completed.

2.1.3: Update the phone system to a cloud-based solution that would allow for work from home. Status: Completed.

OBJECTIVE 2.3: CONTENT MANAGEMENT SYSTEM

2.3.1: Investigate Content Management Systems for Fitchburg State to see if they can simplify web content input and reduce management cost effectively. Status: Completed.

2.3.2: Implement a CMS system if the investigation warrants. Status: Completed.

OBJECTIVE 2.4: IMPLEMENT A PORTAL SYSTEM TO CENTRALIZE COMMUNICATION

2.4.1: Install and develop the Luminis portal system from SCT SunGard. Status: Stopped.

OBJECTIVE 2.5: UPGRADE PHONE END-POINT EQUIPMENT TO VOIP.

2.5.1: Upgrade traditional TDM phones to VOIP to enhance usability and reduce MAC times.

Status: Completed.

2.5.2: Upgrade main phone system so that off-campus users can utilize it and it has more redundancy for faster disaster recovery. Status: Completed.

OBJECTIVE 2.6: CREATE A REPORTING DASHBOARD.

2.6.1: Create web-based reporting that is available to users that display real-time or near real-time performance metrics for the University. Status: Completed.

2.6.2: Implement a reporting solution that allows employees at Fitchburg State to access reports and reporting data in a self-serve web-based format. Status: Stopped.

OBJECTIVE 2.7: IMPLEMENT A USABLE LECTURE CAPTURE SYSTEM

2.7.1: Investigate, pilot and implement an audio lecture capture system. Status: Completed.

2.7.2: Investigate, pilot and implement a full video recording system. Status: Completed.

OBJECTIVE 2.8: VIDEO CAPTURE AND STREAMING FOR SIGNIFICANT CAMPUS EVENTS

2.8.1: Implement a system that allows for simple video/audio capture of significant events on and off campus that can be streamed or stored and later viewed. **Status: Completed.**

OBJECTIVE 2.9: IMPLEMENT VIDEO CONFERENCING

2.9.1: Investigate and implement a mobile video conferencing system that will enable easy video conferencing with off-campus contacts in a high-definition format. **Status: Completed.**

2.9.2: Implement a personally focused video conferencing system that users can use on-campus and off to connect. **Status: Completed.**

GOAL 3: ACADEMIC AND ADMINISTRATIVE SYSTEM SUPPORT

OBJECTIVE 3.1: INCREASE DIGITAL IMAGING ON CAMPUS TO REDUCE STORAGE AND SEARCH COSTS.

3.1.1: Further the use of Banner Document Management in academic and administrative areas. **Status: Completed.**

3.1.2: Develop a process for digitization of forms. **Status: Completed.**

OBJECTIVE 3.2: INCREASE COLLABORATION EFFORTS AMONG LOCAL COMMUNITY COLLEGES AND UNIVERSITIES.

3.2.1: Hardware – Collaborate on major purchases to reduce costs. **Status: Completed/Standard Practice.**

3.2.2: Software– Collaborate on major purchases to reduce costs. **Status: Completed/Standard Practice.**

3.2.3: Best Practices – share best practices on technologies and projects to reduce implementation costs. **Status: Completed/Standard Practice.**

OBJECTIVE 3.3: IMPROVE AND EXPAND MEDIATED SPACES ON CAMPUS.

3.3.1: Increase the mediated classroom space so that 100% of in-use classrooms are setup. **Status: Completed.**

3.3.2: Increase the ability of “smart board” like functionality for all mediated spaces. **Status: Completed/Standard Practice.**

3.3.3: Pilot student mediated spaces to enhance shared learning. **Status: Started.**

OBJECTIVE 3.4: BETA/PILOT TEST

3.4.1: Create relationships with key vendors to Beta new software and services to ensure feedback is steered towards what FSU needs. **Status: Completed/Standard Practice.**

3.4.2: Pilot new technologies to assist in education or learning to discover applicability to our culture and technology environment. **Status: Completed/Standard Practice.**

OBJECTIVE 3.5: UBIQUITOUS LEARNING

3.5.1: Increase the wireless presence on all campus areas. **Status: Started.**

3.5.2: Develop mobile software to enhance services and information offerings on campus. **Status: Completed.**

3.5.3: Develop solutions toward device neutrality. **Status: Completed.**

3.5.4: Develop and support methods to enhance learning using student laptops. **Status: Ongoing.**

3.5.5: Investigate tablet computer and e-book usage for FSU. **Status: Ongoing.**

OBJECTIVE 3.6: IMPROVE DISTANCE LEARNING METHODS

3.6.1: Increase offerings to improve distance learning methods and support. **Status: Completed.**

OBJECTIVE 3.7: STUDENT DASHBOARD

3.7.1: Create a reporting tool that can identify students that are having difficulty with coursework to increase retention. **Status: Completed.**

GOAL 4: SECURITY

OBJECTIVE 4.1: ENCRYPTION

4.1.1: Encrypt all end-point devices except for shared devices which should be purged of stored data regularly. **Status: Completed.**

4.1.2: Encrypt mobile storage devices. **Status: Completed.**

OBJECTIVE 4.2: DATA SECURITY IN TRANSIT

4.2.1: Develop a method to intercept and protect data in transit from unencrypted transmission.

Status: Completed.

4.2.2: Develop training and communication to educate users on proper ways to transfer data.

Status: Completed.

4.2.3: Install an Intrusion Prevention System and segment critical areas of the network. Status: Completed.

OBJECTIVE 4.3: TRAINING

4.3.1: Develop and expand training programs to reduce support tickets. Status: Ongoing.

4.3.2: Develop online programs for self-study for new technologies and to reduce support tickets.

Status: Completed.

OBJECTIVE 4.4: COLLABORATION

4.4.1: Collaborate with other public and private schools on security projects and best practices to ensure that Fitchburg State data is secure. Status: Completed.

4.4.2: Plan for peer audits in addition to annual vendor audits to ensure security of data. Status: Not Started.

GOAL 5: TECHNOLOGY MANAGEMENT

OBJECTIVE 5.1: REPLACEMENTS

5.1.1: Reassess / confirm that the current computer refresh schedule and policies are accurate and needed. Status: Completed.

5.1.2: Develop a replacement schedule for networking equipment. Status: Completed.

5.1.3: Develop a master plan for refresh of mediated classrooms. Status: Ongoing.

5.1.4: Develop a master plan for refresh of common area sound and projection systems. Status: Completed.

OBJECTIVE 5.2: VENDOR ASSESSMENTS

5.2.1: Develop an evaluation system for vendor valuations. **Status: Completed.**

5.2.2: Scorecard all major vendors (+\$20,000 per year) and remediate or drop those that fail.
Status: Completed.

OBJECTIVE 5.3: PRINTING AND COPIER MANAGEMENT

5.3.1: Complete a printing discovery and evaluation for the entire campus. **Status: Completed.**

5.3.2: Investigate and implement ways to reduce costs of printing per page. **Status: Completed.**

5.3.3: Reduce copier fleet costs while providing newer equipment for departmental use. **Status: Completed.**

OBJECTIVE 5.4: PURCHASING AND VALUE

5.4.1: Develop periodic audits to ensure the best pricing is obtained for hardware/software.
Status: Completed.

5.4.2: Encourage collaboration with other state and/or private entities and consortium's to obtain best pricing. **Status: Completed/Standard Practice.**

5.4.3: Ensure IT review of all technology purchases for the University for consistency, pricing and support. **Status: Completed/Standard Practice.**

5.4.4: Ensure that purchased hardware are in line with University "Green" standards. **Status: Not Started.**

OBJECTIVE 5.6: RELIABLE & ROBUST

5.6.1: Examine and develop key architecture to remove single points of failure. **Status: Ongoing.**

5.6.2: Ensure that systems are adequately designed to handle maximum usage and traffic.
Status: Completed/Standard Practice.

OBJECTIVE 5.7: PLANNED UPDATES – CONTINUOUS UPDATING

5.7.1: Plan and schedule upgrades to ensure Fitchburg State is using the most current, best versions of applications. **Status: Ongoing.**

OBJECTIVE 5.8: CAPACITY PLANNING AND REGULAR CHECKS

5.8.1: Ensure that systems are replaced or updated before reaching capacity. **Status: Ongoing.**

5.8.2: Perform annual health checks on key systems to maximize uptime and stability. **Status:** Ongoing.

OBJECTIVE 5.9: FULLY UTILIZE PURCHASED SYSTEMS

5.9.1: Perform periodic reviews of applications to ensure all available options are being utilized.
Status: Not started.

OBJECTIVE 5.10: DISASTER RECOVERY

5.10.1: Create a disaster recovery plan for the University's critical technology systems. **Status:** Completed.

5.10.2: Ensure backups are stored offsite. **Status:** Completed.

OBJECTIVE 5.11: FULLY INTEGRATE AND MANAGE MAC SYSTEMS

5.11.1: Integrate Faculty/Staff Mac workstations with directory services so they can be managed centrally. **Status:** Completed.

5.11.2: Develop a method to automatically backup user files to a network share for Macs. **Status:** Completed.

5.11.3: Standardize on virus protection for Macs. **Status:** Completed.

REVIEW AND REVISION

This plan will be reviewed, revised and updated at least annually. Any changes or updates to this plan will be detailed in the spreadsheet below:

Updates

Objective	Date	Status	Update
1.1.1	Oct-10	COMPLETED	Servers have been virtualized as much as they can be. System loads and support issues hold back some servers from being virtualized.
1.1.2	Oct-10	ONGOING	We're beginning a trial of VMWare's VDI technology on-campus during the Fall 2010 semester to determine feasibility and scalability.

1.1.2	Jun-11	ONGOING	We've completed the trial satisfactorily and are beginning installation of the production system this month.
1.1.2	Dec-11	ONGOING	We've purchased and installed VDI. It's currently in use for about 80% of our podium systems, Kiosk systems, library and open lab systems. Planning to roll this out to the McKay business lab, and begin a trial with adjunct usage.
1.1.2	Jul-12	ONGOING	We're replacing the labs in Edgerly with thin clients and beginning to test fixed pool linked clones by replacing some desktops with them for refresh.
1.1.2	Mar-13	COMPLETED	We've now replaced nearly all labs on campus with thin clients and are replacing desktops as they come up for refresh as appropriate.
1.1.2	Jun-16	UPDATE	Have upgraded all systems in preparation for Windows 10 O/S upgrade.
1.1.3	Jun-11	NOT STARTED	Awaiting deployment of production system in 1.1.2.
1.1.3	Dec-11	NOT STARTED	Staffing issues has delayed this part of the project.
1.1.4	Jan-20	IN PROGRESS	Moved core collaboration tools to Google and have brought up our first server on Azure Cloud.
1.1.5	Jan-20	COMPLETED	All public-facing SSIDs are now rolled into FSUWifi or iOT.
1.2.1	Oct-10	ONGOING	We've completed this for students. Next step is to expand the project to cover full and part-time faculty and staff.
1.2.1	Dec-11	ONGOING	The project scope has changed to increase automation.
1.2.1	Jul-12	ONGOING	We are two weeks away from go-live with the new system.
1.2.1	Mar-13	ONGOING	All accounts are now being provisioned. We need to verify the deprovisioning side and then this is completed.
1.2.2	Jun-11	STOPPED	As IT transitions to a consumer-based approach for end point devices, this isn't possible.
1.2.3	Oct-10	ONGOING	Great strides have been made in automating this for faculty/staff.

1.2.3	Dec-11	ONGOING	Staffing changes had changed responsibility for this.
1.2.3	Mar-13		
1.2.4	Oct-10	ONGOING	We've deployed over 400 new phones and cascaded older phones down to provide newer equipment and standardize on technology. Not yet complete.
1.2.4	Jun-11	COMPLETED	Phones that can be converted to VOIP have been -- including deployments of new Wi-Fi based VOIP phones.

2.1.1	Oct-10	STOPPED	After a printing evaluation revealed that convenient faxing is no longer necessary for most workers. We'll keep faxing in limited areas and move towards a central fax station for departments who use this infrequently.
2.1.2	Oct-10	ONGOING	We're currently investigating different technologies that integrate voicemail and the inbox. A system upgrade to Outlook 2010 is required before moving forward.
2.1.2	Jun-11	COMPLETED	All voicemail users now have message delivery to their Outlook Inbox.
2.3.1	Oct-10	COMPLETED	We've just purchased a CMS system, "ExpressionEngine" and will begin implementation over the next several months.
2.3.2	Oct-10	ONGOING	The system is being deployed through this summer with a go-live date for the CMS in late July.
2.3.2	Dec-11	COMPLETED	Expression Engine has been installed and our new website is utilizing it for content management.
2.4.1	Oct-10	ONGOING	We've been part of SunGard's beta test site for Luminis 5 and are awaiting its production release before putting it in production.
2.4.1	Jun-11	ONGOING	Luminis 5 is being installed by Sungard technicians at this time with the system in production over this summer.
2.4.1	Dec-11	ONGOING	Due to staffing, the new website and numerous issues with Luminis 5 bugs, we are going to deploy this in May of 2012.
2.4.1	Jul-12	ONGOING	We plan on rolling this out this fall softly with a hard cutover in January. It's still quite "buggy" with a lot of requests into Sungard for fixes.
2.4.1	Mar-13	STOPPED	We've stopped this project. The system never became reliable and Sungard support and fixes were not adequate for a production system. With reliability never being stable, we've stopped the project and shifted our focus to mobile solutions.
2.5.1	Oct-10	ONGOING	We've re-provisioned 400 phones on campus with VOIP phones. No need to evaluate if more are needed.
2.5.1	Jun-11	COMPLETED	All phones that can be replaced have been.

2.5.2	Jan-20	COMPLETED	Main phone switch and voicemail upgraded and moved to vendor location.
2.6.1	Oct-10	COMPLETED	This was completed and presented to senior management several months ago.

2.6.2	Dec-11	ONGOING	We're upgrading the Crystal Reports server and licensing to allow all staff on campus to run reports. This project has been difficult because of licensing issues.
2.6.2	Jul-12	ONGOING	Successfully upgrade Crystal – now looking at various dashboards and BI products to enhance this.
2.6.2	Mar-13	ONGOING	We've purchased and are implementing Blackboard Analytics for the campus.
2.6.2	Jun-14	STOPPED	BB Analytics was nearly impossible to configure. Moving to a more supported system, EAB in the future.
2.7.1	Oct-10	ONGOING	A trial system based off an earlier pilot completed at Dartmouth was begun in Spring of 2010. This trial continues through Fall 2010 for more input.
2.7.1	Jun-11	COMPLETED	The system has been used for several semesters and is available for faculty use.
2.7.2	Jun-11	ONGOING	After a pilot of the Camtasia Relay system, we've purchased it and are installing it into production this summer.
2.7.2	Dec-11	COMPLETED	Camtasia is fully in production and we have approximately 15 faculty trained on its use with more to come.
2.8.1	Oct-10	COMPLETED	Complete system created and currently used by Athletics and IT for significant events.
2.9.1	Oct-10	ONGOING	A solution has been researched and trialed. Awaiting final status on overseas collaborations before implementing.
2.9.1	Dec-11	STOPPED	This project is on hold pending the status of the Tianian collaboration.
2.9.1	Jun-15	COMPLETED	We renovated the equipment in Conlon 212, installing a Lifesize point-to-point video conference solution. Nursing has used this room to provide instruction to Boston-area students successfully.
2.9.2	Nov-19	COMPLETED	Moved to Google ecosystem including Google Meet.

3.1.1	Oct-10	ONGOING	We've expanded use of BDMS in purchasing, accounting, HR and Admissions.
3.1.1	Jun-11	ONGOING	Usage of BDMS has expanded in Admissions and HR.
3.1.1	Jun-15	ONGOING	Recently scanned all active HR records into BDMS with a batch import.
3.1.1	Jun-16	ONGOING	Scanned CEE records and imported into BDMS. Beginning work with Anthony building to scan records.
3.1.2	Jun-19	ONGOING	Purchased Dynamic Forms. Currently have over 60 forms digitized and continuing to do more.
3.2.1	Dec-11	ONGOING	Most major purchases are off state contracts or through collaborations with other Universities.

3.2.2	Jun-11	ONGOING	We share software purchasing using several consortiums and partner with other state schools during competitive bids, such as Adirondack software.
3.2.3	Oct-10	ONGOING	Best practices are shared between Universities at the monthly CIO forum and quarterly SMART conferences.
3.2.3	Dec-11	ONGOING	We've shared best practices on several projects. In addition, the CIO has been named to represent the University during PACE meetings in the Commonwealth.
3.2.3	Jul-12	ONGOING	I've completed my PACE membership. We've collaborated on a number of projects through this and will continue to do so.
3.2.3	Mar-13	ONGOING	In addition to regular collaboration with other State schools and the central links group, FSU is part of the Commonwealth's steering committee for a new RFP to enhance collaboration and lower costs.
3.3.1	Oct-10	ONGOING	We've begun mediating the remaining classrooms and expect to finish this project this fiscal year.
3.3.1	Jun-11	ONGOING	After renovations this summer, there is one classroom left -- due to be completed before July 1.
3.3.1	Dec-11	COMPLETED	All applicable classrooms for mediation have been completed.
3.3.2	Jul-12	ONGOING	We've begun a process to provide a limited number of smartboard rooms on campus for those faculty that wish to use them.
3.4.1	Oct-10	ONGOING	We tested a Beta wireless system with Enterasys and eNac agents. We're currently testing a soon- to-be-released Data Loss Prevention system from Checkpoint.
3.4.2	Oct-10	ONGOING	We piloted an audio lecture capture system and plan on testing wireless tablets and a screen-based lecture capture system in Fall 2010. We've also installed and rolled out Wimba Pronto to all users.
3.4.2	Jun-11	ONGOING	Currently deploying virtual workstations.

3.4.2	Mar-13	ONGOING	We just upgraded and/or replaced seven rooms on campus with the latest technology from Smartboard. We continue to use Epson projector's that have pen controllers as applicable.
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3.5.1	Oct-10	COMPLETED	A new wireless system was installed over the summer that provides 100% coverage of 802.11n, b, g and a.
3.5.2	Jun-11	ONGOING	We've deployed our first iTunes/iPhone app with CommMedia's help this June.
3.5.2	Jul-12	ONGOING	We've just purchased a mobile website solution from Modolabs with a go-live goal of September.
3.5.2	Mar-13	ONGOING	We've fully implemented Phase 1 of the Modolabs product and have begun Phase 2, which adds Banner integration, shuttle tracking, admissions and alumni sites and a tour module.
3.5.3	Jun-11	ONGOING	We're deploying VMWare's View product to help achieve this.
3.5.3	Dec-11	ONGOING	Our new website was designed to be cross-platform.
3.5.4	Jun-11	ONGOING	We're deploying VMWare's View product to help achieve this.
3.5.4	Dec-11	ONGOING	We've installed Blackboard IM for all students use.
3.5.5	Jun-15	ONGOING	During the 2014-2015 academic year, we piloted ~ 150 iPads in Nursing and English classes.
3.5.5	Nov-19	ONGOING	Now piloting the use of Chromebooks since we've moved to Gmail.
3.6.1	Jun-11	ONGOING	We've demoed VMWare View to distance learning - once it is deployed in production, this system should significantly upgrade their ability to teach certain classes.
3.6.1	Dec-11	ONGOING	Blackboard IM significantly improves this experience.
3.6.1	Jun-15	ONGOING	We're installing redundant internet connections to prevent single-point-of-failure to our ISP.
3.7.1	Oct-10	ONGOING	Currently working with Northern Essex on a group purchase of Banner's early warning system.
3.7.1	Jun-15	ONGOING	We're using EAB's Student success program to highlight critical areas and students that need help to improve success.
4.1.1	Oct-10	ONGOING	Nearly all devices have been encrypted by this time. Some replacements are needed before achieving 100%.

4.1.1	Dec-11	COMPLETED	All applicable devices are encrypted.
4.2.1	Oct-10	ONGOING	Currently testing Checkpoint's solution to intercept and prevent sensitive data transmissions.
4.2.1	Jun-11	COMPLETED	Checkpoint's DLP solution has been purchased and placed into production successfully.

4.2.2	Oct-10	ONGOING	Training has been provided during multiple on-campus sessions and a training video is being produced for remote users.
4.2.2	Dec-11	ONGOING	Campus-wide training has just completed.
4.2.3	Oct-10	ONGOING	One Tipping Point IPS system has been installed. We plan to install more soon.
4.2.3	Jul-12	ONGOING	We've purchased a 2 nd Tipping Point unit to protect the server subnet. Installing this in the next few weeks.
4.2.3	Mar-13	COMPLETED	The 2nd Tipping Point has been installed and is now actively protecting our DMZ and our Server subnet.
4.3.2	Jul-12	ONGOING	We're creating a 'self-help' video learning page for the University to store training videos. Also have a faculty member create videos this summer to be posted to this site.
4.3.2	Jun-15	ONGOING	Just purchased Atomic Learning for all faculty/staff/ students - this initiative will be led by Sheryl in Instructional Technology.
4.4.1	Oct-10	COMPLETED	A State University and Community University ISO group has been established and is chaired by Fitchburg State to share projects and best practices as it pertains to security.
5.1.2	Mar-13	COMPLETED	We've begun replacing network gear and have a full plan for refresh.
5.1.3	Jun-16	COMPLETED	Joe has developed the plan. Forwarded to CFO for funding.
5.1.4	Jul-12	COMPLETED	All common area sound systems have been refreshed.
5.2.1	Oct-10	COMPLETED	A vendor scorecard system is now in use for <u>evaluating service value with our major vendors.</u>
5.2.2	Oct-10	COMPLETED	See above.
5.3.1	Oct-10	ONGOING	The print evaluation has been completed but <u>remediation has not yet started.</u>
5.3.1	Jun-11	COMPLETED	Printing evaluation has been completed and the University has rolled out a complete managed print service for users.
5.3.2	Dec-11	ONGOING	We're working with the SGA to discuss print quotas for students.

5.3.2	Jul-12	COMPLETED	We've implemented a Pharos printing accounting system to reduce waste. Will go live with this in the Fall.
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5.3.3	Oct-10	COMPLETED	Printing evaluation has been completed and the University has rolled out a complete managed print service for users.
5.3.3	Jun-11	COMPLETED	See above.
5.3.3	Jun-15	COMPLETED	A second printing evaluation has been completed with a new lease for managed printing.
5.4.1	Oct-10	COMPLETED	We routinely seek alternate bids to ensure best pricing is obtained.
5.4.2	Jun-11	ONGOING	We partner on purchases consistently with other State Universities/Colleges and use both Nercomp and MHEC for consortium pricing.
5.4.3	Jun-11	COMPLETED	All technology requisitions are approved by IT before purchase.
5.6.1	Oct-10	ONGOING	We're reevaluating how the alternate datacenter is connected.
5.6.1	Dec-11	ONGOING	We've simplified the connection with the alternate datacenter and continue to restructure to reduce downtime.
5.6.2	Dec-11	ONGOING	Some of this has now been automated with Event Sentry to trigger as certain thresholds are reached.
5.6.2	Jun-19	COMPLETED	Moved to dual ISP configuration including I2 traffic via OSHEAN.
5.7.1	Oct-10	ONGOING	We upgraded Banner and are upgrading Exchange now.
5.7.1	Jun-11	ONGOING	Upgrades to Blackboard and other key systems are <u>scheduled for this summer.</u>
5.8.1	Dec-11	ONGOING	All servers are replaced at 4 years of age.
5.8.2	Oct-10	ONGOING	Performed health checks on Exchange environment and are negotiating for a health check on our VMWare systems.
5.8.2	Jun-11	ONGOING	VM health check has just been completed.
5.8.2	Dec-11	ONGOING	Just completed a VDI healthcheck and added two <u>servers to help with expansion.</u>
5.10.1	Oct-10	COMPLETED	DR plan has been completed.
5.10.2	Dec-11	COMPLETED	Backup tapes now are stored in Iron Mountain facilities in Burlington once per week.

5.10.2	Jun-15	ONGOING	Since we've switched to Barracuda systems for our backups, we're investigating using their cloud service to store our offsite backups.
5.11.1	Oct-10	ONGOING	The configuration for this has been completed and as we service Macs, they are added to the domain.
5.11.1	Dec-11	COMPLETED	Macs are now joined to the directory.
5.11.1	Jun-19	COMPLETED	Have implemented JAMF for Mac management and imaging.

5.11.2	Oct-10	COMPLETED	The latest Mac O/S allows for this. It is currently being configured on all systems with the version.
5.11.3	Oct-10	COMPLETED	All Macs now receive McAfee's A/V product.
