



Hamilton Campus

Information Technology

Strategic Plan

April 2005

Table of Contents

Executive Summary	5
Introduction	5
Information Technology Vision	6
Information Technology Strategic Goals and Imperatives	6
Goal #1: Empower and Enhance Teaching, Learning and Research	6
1.1 Develop an Information Technology Support Plan for Learning and Teaching	6
1.1.1 Assessment of the Use of Technology in Teaching and Learning:	7
1.1.2 Online Course Management:	7
1.1.3 Distributed and Distance Learning Model	7
1.1.4 Instructional Data Storage and Management Services: ..	7
1.1.5 Classroom/Open-access Computing Lab Technology and Support	7
1.1.6 Teaching and Learning Support, Development, and Training	7
1.1.7 Incentives and Support	8
1.1.8 Information Technology Literacy	8
1.2 Develop a Plan for Information Technology Support of Research	8
1.3 Connection and Communication with IT Services	8
Goal #2: Build and Expand Secure, Robust, and Reliable Access to Information and Technology; and Ensure Continuous Innovation	8
2.1 Classroom Network Infrastructure Support and Enhancement	8
2.2 Management and Distribution of Servers	9
2.3 Software Licensing and Management	9
2.4 Security	9
2.5 Wireless	9
2.6 Information Technology Availability	9
2.7 Disaster Recovery	9

2.8 Planning and Funding for Technology.....	9
2.9 Connectivity Enhancement.....	9
2.10 Access to Computers and Networks	10
2.11 Student Computer Ownership Policy.....	10
2.12 Seamless Access to Information, Research, and Digital Resources	10
2.13 Support Model for Innovation	10
2.14 Process for Generation of Innovative Ideas	10
2.15 Evaluation and Testing Processes	10
2.16 Approval and Funding Process	10
2.17 Deployment Strategies	10
Goal #3: Promote Customer-centered Information Technology Services and Support	11
3.1 Customer Service Support Model	11
3.2 Communication Channels	11
3.2.1 Coordination and Management of Projects.....	11
3.2.2 Availability of Information Technology Services and Support	11
3.2.3 Formal Communication Processes	11
3.2.4 Regional Campuses.....	12
3.3 Support and Training	12
3.4 Printing and Imaging Services.....	12
3.5 Manage the Hamilton campus web site	12
Goal #4: Plan and Manage Information Technology	12
4.1 Formally implement new information technology advisory committees to ensure campus-wide input and involvement....	12
4.2 Information Technology Planning	12
4.2.1 Strategic Planning	12
4.2.2 Financial Planning	12
4.2.3 External Funding	12
4.2.4 Quantitative Measurements.....	12
4.2.5 Unit Information Technology Plans	13
4.2.6 Communications.....	13
4.2.7 Integration with University Planning	13
4.3 Information Technology Operations and Management.....	13
Recommendation	13
Appendix A	15

Appendix B	16
Appendix C	17
References	18

Executive Summary

This document is a description of the Hamilton Campus Information Technology (IT) Strategic Plan. What follows is a brief description of the major sections of this document.

The “Introduction” section describes the reason Miami University developed an information technology strategic plan and why the Miami University Hamilton (MUH) campus felt the need to develop an IT strategic plan specific to the Hamilton campus. The processes initiated by the MUH campus to meet this objective involved establishing an appropriate committee, gathering data, and consolidating the information into this document.

The “Information Technology Vision” section describes the vision for information technology, as it relates to the Hamilton Campus.

The “Information Technology Strategic Goals and Imperatives” section describes the goals and imperatives as a result of the research completed by the MUH strategic planning committee.

The “Recommendation” section describes the committee’s suggested follow up options to help the Hamilton campus continue to meet the technology needs of the faculty, staff, students and community.

Introduction

In May of 2004 Miami University completed a comprehensive, university wide Information Technology Strategic Study which included information from the Oxford, Hamilton and Middletown campuses. As stated in the plan “*...Miami has recognized the critical need to develop a university-wide information technology strategic plan and an ongoing planning process to ensure Miami maintains its competitive edge and continues to prosper in the future.*”

As comprehensive as the Miami University’s plan was, it does not address the specific technology needs of the Hamilton campus. As the student, faculty and staff population on the Hamilton Campus continues to grow, the academic curriculum continues to expand, and more buildings are added to the campus, it is important that the technology within the campus continues to meet or exceed the needs of all campus groups. To address this issue and the development of an appropriate plan, Dr. Daniel Hall, Executive Director of the Hamilton Campus along with the full support of J. Reid Christenberry, Miami University Vice President for Information Technology, established a committee in September, 2004. The committee was comprised of Miami University Hamilton Campus faculty, staff, a student representative, and community member, and two representatives from IT Services (See Appendix A for committee membership)

and was tasked with creating an IT strategic plan for the Hamilton Campus that incorporated the mission of the Hamilton Campus and was integrated with the Miami University IT Strategic Plan.

One of the critical steps in developing this document and plan was to gather input from as many faculty, staff, students and members of the community as possible. Several opportunities were provided for members of the user community to provide input during this process, and these activities are described in Appendix B.

Information Technology Vision

Information Technology at Miami Hamilton will encourage, support, enable student learning, faculty productivity, and administrative support and efficiency, by maintaining a transparent and secure environment for learning, teaching, creative endeavors, and research.

Information Technology Strategic Goals and Imperatives

Following are the strategic goals and their imperatives (specific strategies critical to reaching the strategic goals).

Goal #1: Empower and Enhance Teaching, Learning and Research

Teaching, learning, research, and creative scholarly environments are empowered and enhanced by the transparent and seamless uses of technology. These uses of technology provide an environment conducive to effective and inspired teaching and learning, to scholarly research and creativity, and to continued professional development of faculty, students, and staff. Following are the imperatives for reaching this goal:

1.1 Develop an Information Technology Support Plan for Learning and Teaching

The campus will establish a well-communicated and collaborative model that provides high-level support for instructional design and advanced technological and pedagogical innovation, as well as basic-level support for the use of academic technology in course content and/or course management and organization. This support will be grounded in sound principles of learning and in a thorough knowledge of integrating technology for effectiveness and efficiency.

The information technology support model should build on the existing strengths and available campus resources, as well as external resources and collaborative opportunities available to the campus. In developing the model, the following should be addressed:

1.1.1 Assessment of the Use of Technology in Teaching and Learning:

Create multiple means of evaluating technology-assisted teaching and learning throughout students' engagements at the Hamilton campus. Ensure communication of results and methods for improving the quality of the use of technology in teaching and learning.

1.1.2 Online Course Management: Collaborate with students, faculty, and researchers to develop online learning materials, template(s), and media to enhance the learning experience for all students. Direct technical support is not provided by the campus, so we must continue to request strong support for a mission critical online course management system and a robust web-based learning infrastructure to support courses at the campus.

1.1.3 Distributed and Distance Learning Model: Recognizing the general trend in higher education to deliver courses in innovative ways, develop a step-by-step process for faculty to use in creating distributed and distance learning courses to meet the diverse needs and expectations of the students and faculty.

1.1.4 Instructional Data Storage and Management Services: Provide data storage and management services for instructional resources including digital, audio, and visual libraries. Communicate the resources available, and the process for accessing them.

1.1.5 Classroom/Open-access Computing Lab Technology and Support: Provide technology-rich physical and virtual classrooms and open-access computing labs for teaching and learning that are consistent across the campus while reflecting the programmatic needs of the individual disciplines. Computing classrooms and open access labs should be comfortable and aesthetically pleasing. Review and improve the current standards and levels of support provided for all open-access computing labs within the campus. Identify emerging opportunities/technologies to experiment with and prototype. Establish a program to ensure that technology in all open-access computing labs and classrooms is current and refreshed. Develop a plan to enhance traditional classrooms with appropriate technology, and pursue the funding to implement the plan.

1.1.6 Teaching and Learning Support, Development, and Training: Provide comprehensive support, development programs, training activities, and software access in the appropriate use of teaching and learning technologies.

1.1.7 Incentives and Support: Establish appropriate incentives and support so that faculty and staff are encouraged in the creative use and application of information technology for teaching, research, and service.

1.1.8 Information Technology Literacy: Participate with IT Services and the university community in collaboration to establish specific goals for information technology literacy across the university recognizing the diversity of information technology fluency among students, faculty, and staff and the need for discipline-specific goals. Facilitate the development of a training and support program to meet those goals at the Hamilton campus so all can be full participants in the information technology community.

1.2 Develop a Plan for Information Technology Support of

Research: The campus, in coordination with IT Services, will establish a well-communicated and collaborative plan that provides support for faculty research at the regional campuses, in appropriate areas.

1.3 Connection and Communication with IT Services: Develop a process for dialogue and cooperation regarding computing resources for research, between IT Services and the regional campuses. This plan should include: communication of the availability of computing resources for research at the Oxford Campus that are accessible to regional campus faculty; evaluation of the needs of regional campus faculty for computing resources for research; and a collaborative approach to meeting research computing needs for faculty by IT Services and the regional campuses.

Goal #2: Build and Expand Secure, Robust, and Reliable Access to Information and Technology; and Ensure Continuous Innovation

Information technology provides seamless and integrated access to information, education, and research resources for all students, faculty, and staff recognizing the diverse and special needs within each of these groups. Following are the imperatives for reaching this goal:

2.1 Classroom Network Infrastructure Support and Enhancement:

Preserve and enhance the network infrastructure through an ongoing commitment to upgrade, extend, and diversify its capabilities and support. Regularly refresh the network services, introducing newer versions of supported operating systems and key applications (e.g., file, print, and backup) as they become available and in accordance with the campus academic calendar.

2.2 Management and Distribution of Servers: Develop a model for effective management of network file servers including a replacement cycle and the consolidation of distributed servers with more capable and reliable centrally managed server clusters.

2.3 Software Licensing and Management: Evaluate opportunities for providing universally available software licenses to support multiple platforms, developing processes to support volume purchasing of software, creating access to the software regardless of geographic location, and offering central maintenance and clearinghouse capabilities.

2.4 Security: Develop a model to ensure a strong foundation for information technology security coordinated with university continuous operations planning. Develop and implement policies and procedures to protect the security of campus information technology and institutional data, safeguard personal privacy, and respect intellectual property rights, while at the same time promoting academic freedom with access to information.

2.5 Wireless: Aggressively pursue the creation of a community-wide wireless infrastructure by expanding and coordinating wireless access consistent with the campus mission and scope.

2.6 Information Technology Availability: Develop service level agreements for the availability of the information technology infrastructure and application services and detail the availability for normal periods as well as post-disaster periods. Use service level agreements to determine required acceptance testing, stress testing, production outage windows, appropriate deployment of 24x7 infrastructure, and continuous operations activities.

2.7 Disaster Recovery: Develop, document, and test adequate disaster recovery scenarios and procedures to deal with major disasters affecting technology service availability.

2.8 Planning and Funding for Technology: Develop and fund a model for the availability of consistent, up-to-date technology and an “acquire, retire, and upgrade” cycle for computers, software, and other information technology. Implement processes and measures to ensure consistent currency across the campus.

2.9 Connectivity Enhancement: Provide students, faculty, and staff with uniform and reliable access to computing, research servers, and network services and resources, on- and off-campus.

2.10 Access to Computers and Networks: Explore the needs and opportunities for location-independent access to services including technology support, the Internet, university networks, Internet2, and other emerging research networks.

2.11 Student Computer Ownership Policy: Investigate models in existence at other universities that range from required student computer ownership to university-provided computers for all students in the student body. Develop appropriate policies and plans for the campus.

2.12 Seamless Access to Information, Research, and Digital Resources: Develop a model for efficient integration of and seamless and consistent access to the university's information resources including libraries, media, computing, telecommunications, and services such as the Internet and Internet2.

2.13 Support Model for Innovation: Develop and promote a support model for innovation and early adopters that supports this philosophy.

2.14 Process for Generation of Innovative Ideas: Define a process for ongoing collaboration and formal interactions with peers, vendors, university colleagues, and higher education contacts to track technologies and trends and to generate innovative ideas.

2.15 Evaluation and Testing Processes: Develop processes to continually and critically evaluate these ideas in "test-bed" environments, based on the perceived value to the campus's core competencies, and the expectation of interest from potential collaborators.

2.16 Approval and Funding Process: Develop a plan for equipment and software acquisition that includes, but is not limited to research, purchasing, fiscal responsibility, support, and interface with computing services.

2.17 Deployment Strategies: Develop and implement deployment strategies for mainstreaming applicable innovative technologies.

Goal #3: Promote Customer-centered Information Technology Services and Support

Information technology encourages and supports an operational environment that is customer-centered and provides quality assurance for information technology services and support. Following are the imperatives for reaching this goal:

3.1 Customer Service Support Model: Identify Miami University information technology clients, clients with special needs, client characteristics, and client expectations and needs. Explore options for and implement a customer service support model to meet the client needs and that provides reliable, ubiquitous access to and support for the use of information technologies. The model will provide suitable and appropriate technology support across the university and should explore the following service components:

- Distribution of support staff to provide an optimal support structure and ensure continued levels of appropriate support.
- Support for multiple hardware and software platforms and applications.
- User training.
- Help desk service level optimization.
- University-wide problem reporting and tracking processes.
- Service level agreements.
- Client satisfaction metrics.
- Continuous improvement processes.

3.2 Communication Channels: Increase coordination and communication among the many providers, supporters, and users of information technology at Miami University.

3.2.1 Coordination and Management of Projects: Improve internal coordination and management of projects, including more formal coordination across division groups, between Hamilton and Middletown regional campuses, and increased communication and engagement with the university community.

3.2.2 Availability of Information Technology Services and Support: Improve communication with clients about available information technology services and support.

3.2.3 Formal Communication Processes: Define and manage the user environment and experience through formal processes that guide service rollout, technology evaluation, release management (deploy and decommission), system management documentation, user requirements, and feedback.

3.2.4 Regional Campuses: Develop and maintain a common login, roll-out schedule for hardware and software, and implementation schedule between the regional campuses.

3.3 Support and Training: Provide information systems support and training to assist the community in performance of business-related or administrative processes.

3.4 Printing and Imaging Services: Develop a model for printing and imaging services to support the needs of the students, faculty, and staff.

3.5 Manage the Hamilton campus web site: Develop a plan to manage the web site so that it is a current, accessible, dynamic, and engaging resource for the campus, prospective students, and the community.

Goal #4: Plan and Manage Information Technology

Information technology is effectively and efficiently planned, managed, and reflects the complexity of the university's information technology environment and the need for increased participation by and communication with a wide array of university and Hamilton Campus constituents. Following are the imperatives for reaching this goal:

4.1 Formally implement new information technology advisory committees to ensure campus-wide input and involvement.

4.2 Information Technology Planning

4.2.1 Strategic Planning: Develop, gain approval for, and fully implement a campus-wide information technology strategic plan with means for continuous improvement. Establish and implement an ongoing information technology planning process that continually assesses and evaluates information technology at Miami.

4.2.2 Financial Planning: Prepare a campus long-range information technology financial plan spanning operating, capital and development budgets, and incorporating long-term information technology needs.

4.2.3 External Funding: Work with the campus development officer and grant writer to seek additional funding sources to guarantee the campus has the financial resources necessary to implement the IT strategic plan ensuring continuous improvement.

4.2.4 Quantitative Measurements: Develop quantitative measures that will assess the accomplishment of the strategic goals.

4.2.5 Unit Information Technology Plans: Encourage the college, schools, libraries, academic, and administrative units to annually consider their information technology needs within the context of the overall campus information technology plan to: 1) facilitate the individual mission of each unit, and 2) recognize points of integration and coordination with the campus information technology plan.

4.2.6 Communications: Develop and implement ongoing coordinated information technology communications and feedback mechanisms for students, faculty, and staff.

4.2.7 Integration with University Planning: Ensure that information technology is integral to all major strategic planning efforts across the campus.

4.3 Information Technology Operations and Management: Establish an information technology operational environment that aligns operations and management of information technology across the campus and is adequately supported so that:

- Costs are effectively managed.
- Services have the resources required.
- Resource alternatives are explored.
- Resources are shared and used to their maximum potential.
- Collaboration is a priority.
- Services are continually assessed and improved.

Recommendation

Developing an IT Strategic Plan is only the first step in the process of maintaining and improving how we meet the technological needs for the Hamilton Campus. As the campus continues to expand and adds more faculty, staff, students and buildings, the campus technology must change and adapt to keep the campus current and competitive. To that end, this committee recommends that the campus revive and redefine a technology committee that will be tasked with the following functions:

- Develop a campus-wide IT Project Plan
 - Identify and define IT projects that will meet the objectives stated in this document. The plan will include a tentative time line, responsible person/department, and cost to completion.
 - Prioritize all the projects on the list.
- Develop a regular meeting schedule to
 - Evaluate the current global state of technology to see if any adjustments need to be made to the MUH IT Strategic Plan.

- Evaluate the status of each project that is in-process, to insure that it is on time and on budget.
- Evaluate the current list of projects for possible adjustments.
- Report to the Executive Director on current project status and other recommendations on the status of technology on the Hamilton Campus.
- Address other issues related to the current and future state of technology on campus.

Appendix A

Core Project Team

The Information Technology Strategic Planning project is being managed using project management processes; therefore, a Core Project Team was created to lead the project and represent the Hamilton Campus with additional perspective from the community and Institution support from IT Services. Following are the Core Team members who were selected because of their perspective and their ability to participate in this process:

Jim Lipnickey, Staff	Director of Computing Services and Project Manager
Susan Reams, Faculty/Staff	Nursing Department
Carol Stubblefield, Staff	Student Services
Beverly Taylor, Faculty	Physics Department
Kenny Craig, Community Representative	President/CEO, Greater Hamilton Chamber of Commerce
Robert Speckert, Faculty	Chair, Engineer Technology Department
Kathleen Weber, Staff	Director of Continuing Education
Chris Connell, Staff	Assistant Executive Director for Administration and Budgeting
Scott Isaacs	Student
Diane Delisio, Faculty	Chair Computer and Information Technology Department
Debi Allison, IT Service Representative	Miami University Deputy Chief Information Officer
Kay Roman, IT Service Representative	Cornelius & Associates

Appendix B

Sources of input

When the committee gathered data to be used as a foundation for this document, the objective was to be as comprehensive and inclusive as possible. The goal was to ask as many people as possible, to provide as many alternatives to provide input as possible and accommodate the varied schedules of all those people that wanted to give input. Two functions were initiated to meet this objective; advertise how input could be provided and a method to provide input.

Advertisement

The following advertisement methods were used:

- The MUH campus newspaper “HangTime”
- The Miami University newspaper “The Report”
- Paper “tents” were placed on all the tables in the MUH dining facility
- E-mail was sent to the following organizations:
 - MU Middletown faculty, staff and students
 - Continuing Education Computer Instructors
 - Engineering Technology Advisory Council
 - MUH COOP Business partners
- MUH website

Methods of providing input

The following methods were provided for people to provide input:

- Questionnaire (See Appendix C)
- MUH website - On-line questionnaire
- Six different open sessions which included two sessions each for faculty, staff and students
- Six class surveys using the above mentioned questionnaire for approximately 200 students which included the following academic areas:
 - Engineering Technology;
 - English;
 - Nursing;
 - Business Technology;
 - Micro-Biology; and
 - Music.

Appendix C

Questionnaire

Optional information:

Name: _____

Email address: _____

Telephone number: _____

- Hamilton Campus
- Middletown Campus
- Oxford Campus
- Other

- Faculty
- Student
- Staff
- Other

1. What works well?

2. What could be improved?

3. What types of technology should be available?

4. What types of technology support should be available?

5. Other comments

References

Miami University web site (2004), Information Technology Strategic Plan. (http://www.units.muohio.edu/mcs/ITStrategicPlan/ITPlan/ITPlan_Final.pdf). May, 2004.