

# 2000 IT Strategic Plan

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# Section I. Introduction

## **A. Purpose of document**

The strategic plan for Gannon's information technology establishes the principal goals and objectives through Summer, 2004 for the development of the technological infrastructure and services that will enable the university to fulfill its mission. The tactical focus of the document will outline IT operating objectives for the years 2000 and 2001, keeping in mind how those operational objectives achieve the University's and ITS' strategic initiatives.

## **B. Mission of Gannon University**

Gannon is a Catholic, Diocesan, student-centered university which provides for the holistic development of undergraduate and graduate students in the Judeo-Christian tradition. As such, it offers each student outstanding teaching and a value-centered education in both liberal arts and professional specializations, in order to prepare students for leadership roles in their careers, society and church. The University faculty and staff are committed to excellence and continuous improvement in teaching, learning, scholarship, research and service. The University's environment is to be one of inclusiveness and cultural diversity.

## **C. Mission of Gannon Information Technology Services department**

The mission of Gannon's Information Technology Services department is to provide the technology infrastructure and tools to enhance the productivity of students, faculty and staff. We will provide the leadership to position the University for future technological advancements.

## **D. Vision of Technology at Gannon University**

The task of the University's Information Technology Services department is to facilitate this mission and vision by providing academic information and computing resources to promote effective organizational functioning by means of creating an appropriate technology infrastructure. In addition, as the wider society becomes computerized and "informatized," the university's information technology infrastructure must prepare and support the Gannon community for the wider educational challenges of life in an information society.

Strategic planning for Gannon's information technology must take into account major trends in three dimensions of the university environment: the world of higher education, the information technology and systems sector, and the general social and organizational environment. In addition, of course, it must take account of trends within the university itself. Our Vision for Gannon University is to become a recognized model of educational excellence in all that we do.

In 2004 all Gannon students will access and process information electronically. Students will register for classes, check their syllabi, obtain assignments and study guides, receive

their grades and manage their academic matrix from their residence halls, apartments and homes. Students will have easy and virtually continuous contact with faculty through multiple communication channels.

Library offerings will be increased by virtual connections to more information sources than have ever been available to Gannon students. Access to library information will extend beyond the wall of the library into every classroom, residence hall room and home. The Gannon library will become a regional information resource as access is extended to Catholic High Schools throughout the Diocese.

Every classroom at Gannon will have an electronic podium allowing a technologically savvy faculty to enhance student learning through audio, video and data resources that will be prevalent throughout academe. Access to Gannon's network resources and the internet will be available in every seat in every classroom. Each student and faculty member will bring their laptop to every class, many of which will be held virtually via the web. Each course will have a web presence (syllabi, lectures, resources, assignments, electronic forums, etc.) to augment the classroom experience.

Student writing will be published and distributed electronically. Writing will be enhanced by hyperlinks to source material, supplemental material, photos and graphics. Gannon students will work collaboratively with students around the country and around the world, sharing data and presenting papers in the virtual convention hall of the Internet. In order to accomplish this, students will learn to Discover, Acquire, Evaluate, Organize, Present and Store information electronically.

Gannon University will be a regional center for virtual learning, expanding beyond the geographic boundaries of downtown Erie, offering training, professional development, and degrees via distance learning technologies. Faculty will maintain lifetime connections to Gannon graduates through virtual alumni gatherings and professional seminars.

Strengths such as the information technology infrastructure, combined with Gannon's stability, strategic initiatives and overall academic success are factors that will continue to give us a competitive advantage well into the 21st century.

## **E. Scope of the Plan**

Since the present life-cycle of a generation of technology is about two or three years, what the plan should lead to is not a static system but a foundation for subsequent periods. While it is essential that we plan for a technology infrastructure adequate for the present stage of the University's technology development, it is vital to the University's future that we create a foundation for subsequent phases, including the technologies now appearing on the horizon. Hence, the current plan focuses on the ingredients required for a successful educational technology environment of the current generation using industry-standard technologies and protocols. Successfully implemented, such a system should be an effective platform for emerging technologies and a competitive advantage in today's market.

## **F. Trends**

### **1. Higher Education**

Information technology is becoming both cheaper and more intelligent, and the work of the students and faculty increasingly involve the use of computer tools to manipulate, analyze, and process information that, more and more, is stored in machine-readable form and on computer networks. Hence the work and life of the students and faculty are increasingly mediated by information technology. Higher education environment is currently marked by increased generalization of computing use by faculty and students; increasing emergence of information exchanges by faculty, students, and administrators through networks; widespread use of online bibliographic databases to identify the existence, content, and whereabouts of information; emergence of limited full-text electronic resources and electronic imaging for non-character-based information resources; a plethora of network databases and independent protocols and applications which are beginning to converge in common digital formats and processes and respond to the evolution of national standards; continued reliance on labor-intensive distribution channels for the delivery of instruction and paper-based information resources; a perceived shortage of information management generalists to support faculty, librarians, administrators, information and media specialists, and students; and various levels of competition and cooperation among organizational groups which are being drawn together by overlapping technology-based concerns -- librarians, computer center staff, faculty.

Thus, despite the cheapening of technologies, there is in higher education a marked tendency of augmented capital investment per student, creating a long-term pressure on institutions to continually invest in information infrastructure and upgrade them in accordance with the rapid pace of technological change in information systems that bears directly on higher education.

Given the financial pressures that weigh on our campus and that are expected to continue to do so, and given the growing numbers and percentages of students in higher education as well as the increasingly recognized social and economic need for the ongoing training and re-education of faculty and the upgrading of their skills, our campus can be expected to look to staff development at a significant level. Technologies of information and of communication (e. g. computer networks, two-way video conferencing, video on demand, telephony) facilitate the kind of distance learning and participation in educational activities that the situation of many faculty and students demands. Therefore these technologies can be expected to have an important place in the strategies of our campus as they attempt to position themselves in students education. Universities with significant financial and technological resources and skilled staff in this area will have an important advantage.

### **2. Information technology**

While information technology is in a state of rapid change at many levels, the following trends are most relevant to higher education, in general, and Gannon University in particular:

- the digitization of all forms of information and media, so that textual, graphic, sound, and film/video data can be stored in computers, communicated over networks, integrated in their appearance to the individual, manipulated by a common set of tools, and incorporated into multi-media educational packages;
- the integration of all media and computer systems via networks, so that it is possible, via a single network, to access information whether it is stored locally or globally; the emergence of client/server computing (see figures 3,4, and 5), through which computers cooperate intelligently over networks;
- the development of common standards and protocols that enable all computers and networks to interoperate with one another, including database standards that enable all data to be comprehensibly structured and intelligently queried from the users' point of view;
- the lower cost and condensation of data storage, so that it is possible to store larger and larger amounts of information in smaller and cheaper forms;
- the augmentation of the speed of networks, so that it is possible to transmit larger and larger amounts of more and more complex information over great distances at high speeds (e. g., a library of one million volumes can in principle be transmitted over a network in few hours);
- the simplification of user interaction with more and more information through the creation of graphical interfaces, more intelligent tools, and virtual-campus-wide information systems with gateways to global networks;
- the development of more intelligent software for use in simulation, visualization, and analysis that converts the computer from an office machine to an intellectual partner of the student;
- the development of sophisticated forms of human communication via networks, such as computer conferencing, interactive multi-media communication, and electronic publishing, that makes connection via networks an independently valuable communication forum rather than a poor substitute for face-to-face interaction;
- the emergence of the virtual library, in which the world's scholarly resources and archives can be made accessible to library patrons in sophisticated forms regardless of the physical location of the resources or the patrons, and in which patrons can intelligently query and interact with these resources. The virtual library includes not only traditional library materials, stored and made available in electronic, digital form, but information objects that exist only in the virtual space constituted by computer systems and networks.

Figure 1 summarizes some of the trends in Education and Information Technology.

This matrix divides computing environments into five generations that conveniently coincide with the start of a new decade. (The precision of this alignment should not be taken literally, but the data indicates when that generation has entered the mainstream.) It appears that many users are confused by the terminology adopted by vendors, as well as by how evolving technologies relate to their own knowledge and experience. This matrix presents a schema for the description of computing environment, which outlines some basic shifts occurring in the technology of data processing. The key idea behind the diagram is that certain style changes in the environment can be grouped at a series of time boundaries, and that the characteristics of each generation seriously affect the skills and resources required to enjoy success at that level. Thinking about computing environments within this framework should help in understanding the value and relevance of installed technologies and methods, evaluating the positioning and capabilities of vendors, and making decisions about the deployment of resources to support strategic information goals.

<b>GENERATION</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>YEAR</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>Model</b>	Batch	Online	Online Transaction Processing	Client/Server	Universal Connectivity
<b>Interface</b>	Cards and Printouts	Typewriter terminal	Full-screen Character Terminal	Graphical User interface	Multi-media Speech
<b>Data Management Platform</b>	Sequential	Indexed	DBMS	RDBMS	Complex Objects
<b>System Platform</b>	CPU	CPU + Line-at-a-time Terminal	CPU + Full-screen Terminal	CPU + local Network workstation	CPU + Local network workstation
<b>Application Development Method</b>	Structured	Process	Screen	Data	Object
<b>Benefit</b>	Automation	Timeliness	Mission-critical	Strategic	Survival

Freeman, Grey, and Jerry York. "Client/Server Architecture Promises Radical Changes." Spring 1991, pp. 15-22. The Best of CAUSE/EFFECT 1978-1991, Julia A. Rudy, Editor. Figure 1

### **3. Social and organizational environment**

The results of the "informatization of society" are becoming increasingly visible. They include the emergence of a truly global economy organized around multi-national corporations and virtual organizations, in which the principle of organization around spatial location and contiguity is increasingly replaced by the principle of organization around information flows, centered in the organization's computer network and distributed databases. In this e-economy, "organization structures and cultures are evolving away from traditional hierarchical patterns, toward flexible, teamwork-oriented patterns which cross unit boundaries with focus on problem solving and client service." These patterns reward individuals and organizations that excel in problem-solving skills and information access and analysis. They also favor information systems that maximize user control of data with easy-to-use, integrated, graphical user interfaces that provide both access to a coherent variety of networked information and a set of flexible information tools for the use of that information.

## Section II. Self Assessment

### A. Gannon's present Information Technology environment (as of July, 2000)

1. How many computer labs do you have, with how many total PCs? How many of those PCs have access to the internet?

Type of Lab	Number of Labs	Total PCs	PCs w/ Internet Access
<b>General Purpose</b>	<b>9</b>	<b>150</b>	<b>All</b>
<b>Department Specific</b>	<b>13</b>	<b>195</b>	<b>All</b>
<b>University Total</b>	<b>22</b>	<b>345</b>	<b>All</b>

2. How many classrooms have access to the internet?
- Over 30 classrooms have a network connection so the instructor can access a presentation on the server, materials on the course server or the internet.
  - About 10 have a network connection for each student in addition to one for the professor.
  - 1 classroom is fully equipped for videoconferencing and 10 have satellite capabilities.
  - 15 classrooms are multi-media ready with digital diases and ceiling mounted projectors.
  - We are investigating wireless to provide cost-effective network and internet access in many more classrooms.
3. How many residence hall rooms have access to the internet?
- We have over 400 student rooms, housing nearly 1,000 students and all are fully wired. We feel the level of connectivity has been directly responsible for the great number of returning students living in University housing.
    - Every resident student has a high-speed connection to our network & the internet
    - Every resident student has a cable TV connection
    - There is 1 phone line for students living in 1 or 2 person rooms and 2 phone lines for students living in a room with 3 or more individuals
4. What do students pay for technology use?
- Courses that have a computer lab component charge a per credit fee
  - Resident students pay a \$100 per semester GU Connect fee
5. How many faculty and administration PCs do we have on campus?
- We are very excited about our new Dell partnership. Over the next few years we will replace every PC on campus with a Dell PC. Providing state-of-the-art technology for our students, faculty and staff. This includes a student purchase program to help facilitate ownership by more students.
  - 600 (All full-time faculty and administrators; many adjunct professors either have a PC or have access on campus to one).
  - About a 5 to 1 student to faculty/administrator PC ratio
  - About an 9 to 1 student to computer lab PC ratio
  - About a 3 to 1 student-to-PC ratio

6. How many students have their own PC?
  - Through the Business Technology Scholars program, nearly 100 students have leased a laptop through the University. Revamped curriculum to feature technology-intensive courses, require every student to have a laptop, teach nearly every course utilizing technology and students utilize technology to learn and complete assignments. This program will serve as a model to transform other programs and equip every incoming student with a laptop.
  - Over half (550) of the 950 resident students have PCs in the rooms
  
7. Where is there access for a student with a laptop?
  - Laptop lab in Beyer and a few dozen stations in Zurn computer lab
  - 12 new laptop workstations in Waldron and a cybercafe in the Nash library
  - Our goal with wireless is to allow network availability to students and faculty with a laptop anywhere in any building
  
8. How has technology use changed over the past decade at Gannon?
  - 10 years ago, a mainframe computer with dumb terminals was predominantly used by computer science and engineering faculty & majors and to run the administrative-side of the business. Now everyone at the University has ample access to a PC and the Internet and use technology nearly every day. We are committed to utilizing technology to enable the learning process and equipping our students with the technical skills required in today's marketplace. That commitment is demonstrated by significant investments to:
    - wire every student room on campus for network and Cable TV access
    - provide a PC for every full-time faculty member and administrator
    - provide training and multi-media resources to faculty members
    - increase the size and technical expertise of the ITS staff
  - We have developed a campus environment with sophisticated computing capabilities. Here are a few examples of technology use at Gannon:
    - A partial DS3 6 Mbit connection to the internet
    - Many classrooms with ceiling-mounted projectors and digital diases
    - Over 100 courses are taught completely or partially via the WWW
    - Enrolling students this Fall in a new MS in Computer Science
    - Summer faculty institute acclimates faculty to instructional technology
    - CIE/CIM center has been chosen to be the state-wide technology trainer for the National Guard and the National Guard has their regional training center on our campus.
    - Library resources can be accessed from anywhere over the internet
    - Faculty members use technology to prepare and present course materials, communicate with students and peers, conduct research, etc.
    - Students use technology to communicate with faculty, each other and family, complete and submit assignments, etc.
    - Administrators use technology to perform the back office functions of the University (purchasing goods and services, registering and grading students, paying employees, tracking donations, etc.).

## **B. Transition from a low-resource model to a high-resource model**

In the late 1980s and early 1990s, Gannon University approached information technology spending as a necessary evil that was to be held in check however possible. In recent years, the University has demonstrated a commitment to allocating resources, both financial and human, to the pursuit of excellence in Information Technology. The University has realized a high-resource model, with recurring funds for regular upgrades, is necessary to elevate the state of technology to provide a competitive advantage.

## **C. Internal Factors: Strengths & Weaknesses**

### **Strengths**

- Every Gannon employee and student has sufficient access to desktop computing allowing widespread use of information technologies.
- Gannon's campus network infrastructure is extensively developed to provide connectivity across the campus including classrooms, meeting rooms, residence halls, labs, offices and auditoria.
- Gannon has Internet connections able to support regional and global networking partners and information resources.
- The Business Technology Scholars Program has been successfully implemented and may serve as a model for other program's to integrate technology into the curriculum.
- Major technological advancements have occurred at Gannon over the last few years that can be portrayed to prospective students, parents and the community as a distinctive competitive advantage of Gannon where students become technologically competent and global ready.
- As a smaller institution, Gannon can often react to changing technologies more quickly than its competition.
- Academic and Administrative computing committees work effectively.

### **Weaknesses**

- Due to funding limitations, it is challenging to stay current with equipment and to maintain full infrastructure and technology base while striving to implement new technologies and services.
- ITS staff turnover, coupled with a tight labor market, makes it difficult to recruit, train and retain qualified staff.
- Instructional technology has not been fully integrated across the curriculum and there are no training resources dedicated to supporting the faculty
- Gannon has not fully leveraged web technologies and has no resources dedicated to web development
- Due to its decentralized structure, centrally established plans are sometime difficult to implement.
- Lack of documentation results in unnecessary set backs when staff are replaced.
- Lack of a fully developed Intranet limits access to data and the opportunity for greater collaboration.

## **D. External Factors: Opportunities & Threats**

### **Opportunities**

- There is an opportunity for non-traditional delivery of Gannon education resources through the Internet via the courseware server
- There is an opportunity through Internet partners for the collaborative use of services and offerings to enhance education, minimize operating costs and increase enrollment
- More aggressive pursuit of technology grants could provide additional sources of funds to advance technology at Gannon
- Gannon's technological strengths create a competitive advantage to recruit prospective students and their parents as well as in the Erie Community.
- Portal computing would allow for the establishment of a "one stop shopping" point on the web for all Gannon Community members to interact
- Required laptop or PC ownership are more acceptable and programs facilitate PC ownership

### **Threats**

- Due to rapidly changing technologies, introduction, implementation and obsolescence of technology occurs faster than the institution and faculty can adapt and faster than the ITS staff can train
- Many of Gannon's competitors utilize technology to a greater extent in terms of student registration, access to grades, etc
- Technology expectations of students and parents will rapidly increase over the next few years resulting in increasing pressure to stay on top of the technology curve
- Internet II will greatly enhance the method, speed and capabilities of distance education and multi-organization collaboration
- Distance Education becomes more of a threat to traditional campuses as the method, speed and capabilities to offer it continue to be enhanced
  - With Gannon's administrative systems, platforms and tools not being state of the art, it is difficult to attract and retain qualified candidates who cannot leverage knowledge of more mainstream development and database tools

# Section III. Strategic Focus

## A. IT Strategic Initiatives

Described below are the key initiatives to guide the deployment of Information Technology across the University in the next 3-5 years. They are designed to integrate technology into all appropriate aspects of University operations, with the desire to:

- Uphold our mission of student-centeredness
  - Enhance our ability to serve all our constituencies
  - Position the University as the recognized leader in the region in terms of capitalizing on IT capabilities
1. Develop an institutional commitment to the Intranet/Internet in order to make Gannon a more productive institution.
  2. Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
  3. Improve classrooms by integrating computing environments and learning environments (including wired classrooms, daises, acoustics, tables, chairs, etc.).
  4. Establish a dedicated instructional technology group to support faculty to integrate technology into delivery of their courses
  5. Enhance administrative systems to enable all information and processing requirements to be accomplished via the web.
  6. Establish a web-based information portal to focus Gannon-related information for all constituents of the University (students, faculty, staff, prospective students, benefactors and alumni).
  7. Develop and support ITS staff by creating a progressive environment in IT, including platforms, tools and training.
  8. Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.
  9. Leverage Gannon's computing environment to establish local, national and international collaborative partnerships to enrich the institution's learning environment and support program growth.

## B. Criteria for IT Tactical Initiatives

These are overarching criteria that are applied to every tactical initiative to ensure the fundamental objectives for implementing technology at the University are met:

1. Use industry-standard, compatible technological platforms
2. Maximize interoperability
3. Provide ease of access to information and common interface
4. Manage information technology resources efficiently and effectively
5. Promote user self-sufficiency and ownership

### C. Department-Driven IT Tactical Initiatives

Department-Driven initiatives foster a fundamental change in how a University department operates. The department and its customers benefit from improved efficiency and/or effectiveness. Many of these initiatives require a University-wide commitment because the application of technology impacts the operation of many departments and/or a fundamental change in how the entire University operates will result. The ITS department is involved in the technical implementation, but the project should not be initiated without University-wide commitment and leadership from the department(s) utilizing the technology.

**Priorities for fiscal years 2001 and 2002 (described in detail on following pages):**

Current Priority	Initiative	FY 2002 Additional Budget Request	
		One-time	On-Going
Very High	Facilitate web access to student records - ITGC endorses pursuit of this initiative in FY2001	None	None
Very High	Establish resources to enhance Gannon's web sites - ITGC endorses a commitment to the wide-spread use of and enhancements to our University websites	\$15,000	\$120,000
Very High	Electronic Degree Audit - ITGC endorses pursuit of this initiative in FY2002	\$50,000	None
High	Laptop PC for every student - ITGC endorses a thorough evaluation by the TLTR in FY2001	None	None
High	Implement a data query and analysis tool - ITGC endorses pursuit of this initiative in FY2002	\$55,000	\$10,000
Moderate	Implement a University-wide Information Portal - ITGC endorses pursuit of an alumni community in FY2001, while defining University-wide portal requirements and benefits.	None	None

**Other initiatives (Very High/High priorities described in detail on following pages):**

Current Priority	Initiative	FY 2002 Additional Budget Request	
		One-time	On-Going
High	Expand utilization of campus One Card system - ITGC endorses pursuit of this initiative in FY2002	\$10,000 \$15,000	\$ 3,000
High	E-Purchasing (on-line purchase requisitions) - ITGC endorses pursuit of this initiative in FY2001	\$5,000	None
High	University-wide calendar/scheduling application - ITGC endorses pursuit of this initiative in FY2002	\$ 20,000	\$5,000
Moderate	Implement a data warehouse - ITGC endorses pursuit of this initiative to the extent it is a pre-requisite for the implementation of a query and analysis tool.	None	None
Moderate	Distribution of instructional video across campus	None	None
Moderate	Document departmental user procedures	None	None
Moderate	Enable E-Commerce Capabilities (on-line receipt of funds)	None	None
Low	Payroll Time & Attendance	None	None
Low	Implement Datatel Budget Management module	None	None
Low	Implement Datatel Position Budgeting module	None	None
Low	Implement Datatel HR Leave Plans	None	None

Department-Driven IT Tactical Initiatives:

## **Facilitate Web Access to Student Records**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Develop an institutional commitment to the Intranet/Internet in order to make Gannon a more productive institution.
- Enhance administrative systems to enable all information and processing requirements to be accomplished via the web.

### **Description:**

- Purchase and implement the hardware and software (Datatel WebAdvisor and related applications) required to allow student, faculty and staff access to Datatel via a web browser. Develop student and faculty on-line training materials and communication plan. Implement support structure, primarily on-line, to resolve user problems 24/7.

### **Outcomes/Benefits:**

- Improved customer service (24/7 availability)
- Reduced clerical workload due to student self-service
- Potential recruiting advantage through on-line application process and demonstration of institution's technical know-how
- Reduced printing costs as students print grades, schedules, etc. themselves

### **Responsibility:**

- DRIVEN BY: Registrars (process definition, system setup & testing, faculty training)
- Administrative Computing (application implementation and integration)
- Networking (hardware implementation and user account management)

### **Time Table:**

- Q4, 2000 – Purchase and install required hardware and software
- Q1, 2001 – Configure and test application
- Q2, 2001 – Roll out for Fall, 2001 semester

### **Budget (Capital vs. Operating):**

- Fiscal year 2001 ITS Operating budget to cover software and hardware purchase and initial training costs

### **Evaluation/Measurement:**

- Best determined by Registrars

Department-Driven IT Tactical Initiatives:

## **Establish Resources to enhance Gannon's web sites**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Develop an institutional commitment to the Intranet/Internet in order to make Gannon a more productive institution.
- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

### **Description:**

- Establish a commitment from all areas of the University to dedicate resources to maintain information accuracy, continually expand content and utilize the web as the preferred communication mechanism.

### **Outcomes/Benefits:**

- Increased 'stickiness' of our site for prospective students and alumni
- Faster, more-accurate information-dissemination vehicle

### **Responsibility:**

- DRIVEN BY: IT Governance Council (establish commitment and resource recommendations to President's staff); ITS (develop methods to facilitate updates to web sites, enhance layout and design of InsideGU)
- Key Departments (develop initiatives to publish content to the web, implement procedures to update web pages at least weekly)

### **Time Table:**

- Q3, 2001 – Hire Web Master and develop streamlined web update process
- Q4, 2001 – Implement departmental processes to update web pages
- Q1, 2002 - Establish mechanisms to measure 'freshness' of web content

### **Budget (Capital vs. Operating):**

- \$60,000 (on-going) – Salary and benefits for University Web Master
- \$15,000 (one-time) – Upgrade web site software and development tools
- \$60,000 (on-going) – additional, on-going staff in key departments to maintain web pages

### **Evaluation/Measurement:**

- Best determined by key departments

Department-Driven IT Tactical Initiatives:

## **Electronic Degree Audit**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Enhance administrative systems to enable all information and processing requirements to be accomplished via the web.
- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

### **Description:**

- Setup Datatel application with University degree requirements to assist students and faculty in the advisement process.

### **Outcomes/Benefits:**

- Consistent application of degree standards
- Improved availability of information, including “what if” scenarios, to assist students in academic program decisions

### **Responsibility:**

- DRIVEN BY: Deans (define and document degree requirements); Registrars (setup & test system; train faculty and students)
- Administrative Computing (applications installation and on-going maintenance)

### **Time Table:**

- Q1, 2001 Define and document degree requirements
- Q2, 2001 System setup and testing
- Q3, 2001 Advisor training and pilot roll-out

### **Budget (Capital vs. Operating):**

- \$50,000 (one-time) Datatel on-site system setup and training

### **Evaluation/M Measurement:**

- Best determined by Deans

Department-Driven IT Tactical Initiatives:

## **Laptop PC for every Student**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Improve classrooms by integrating computing environments and learning environments (including wired classrooms, daises, acoustics, tables, chairs, etc.)
- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

### **Description:**

- The goal of this initiative is to allow ubiquitous students access to a Personal Computer, both at home or in their residence hall, to graduate students comfortable using technology everyday, and in the classroom, to allow faculty to integrate technology into their instruction as they see fit.
- Potential options include:
  - 1) Provide (or require) a laptop computer to every incoming freshman
  - 2) Provide loaner laptop computers to outfit entire classrooms
- An analysis of the available alternatives and feasibility of this initiative will be conducted, then endorsement from the IT Governance Council and President's staff will be required before implementation proceeds.

### **Outcomes/Benefits:**

- Flexibility for faculty to utilize technology at any time
- Potential recruiting advantage as prospects use technology as a measuring stick
- Technology-savvy graduates

### **Responsibility:**

- DRIVEN BY: Deans (integrate technology into curriculum)
- Finance and Financial Aid (identify acceptable funding solution)
- ITS (Develop customer support services to assist students 24/7)
- TLTR (faculty training on instructional technology)

### **Time Table:**

- Q1, 2001 – Analysis by TLTR and recommendation
- Q2, 2001 – Evaluation by IT Governance Council and Provost's Council
- Complete pilot evaluation for start of Fall, 2001 semester
- Complete project for start of Fall, 2002 semester

### **Budget (Capital vs. Operating):**

- \$1,500,000 (on-going) to equip all incoming freshman
- \$60,000 (on-going) for additional ITS support staff

### **Evaluation/Measurement:**

- Best determined by Deans

Department-Driven IT Tactical Initiatives:

## **Implement a data query and analysis tool**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

### **Description:**

- Identify an easy-to-use tool to develop queries and reports and analyze data from our Administrative systems. Base capabilities include: integration with Microsoft Office suite, Structured Query Language support, web-based publishing of output and statistical analysis functions.

### **Outcomes/Benefits:**

- Allow Administrative departments easier access to information
- Leverage power of PC and Microsoft Office to analyze and report data
- Facilitate electronic distribute of information via the web

### **Responsibility:**

- DRIVEN BY: Key Administrative departments (define reporting views, learn tools); ITS (project leadership and implementation)

### **Time Table:**

- Q3, 2001 Investigate options and make purchase recommendation
- Q4, 2001 Define reporting views and conduct user training
- Q1, 2002 Utilization across departments

### **Budget (Capital vs. Operating):**

- \$25,000 (one-time) software purchase
- \$20,000 (one-time) high-powered server(s) for data storage and reporting
- \$15,000 (one-time) on-site training and implementation consulting
- \$10,000 (on-going) annual maintenance for software and hardware

### **Evaluation/Measurement:**

- Reduction in average time to develop a report
- Increase in the number of reports distributed electronically

Department-Driven IT Tactical Initiatives:

## **Implement a University-wide Information Portal**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Develop an institutional commitment to the Intranet/Internet in order to make Gannon a more productive institution.
- Establish a web-based information portal to focus Gannon-related information for all constituents of the University (students, faculty, staff, prospective students, benefactors and alumni).

### **Description:**

- Portals provide customized, personalized web access to University resources. A true portal provides a single log-on for all systems, knows who you are and presents information relevant to your role (eg, student, faculty, staff, prospect, alumni, etc.). They facilitate collaboration among individuals with like interests.
- Embarking on an initiative of this magnitude requires a commitment from all areas of the University to dedicate resources to manage and utilize this tool. An analysis of the available alternatives and feasibility of this initiative will be conducted, then endorsement from the IT Governance Council and President's staff will be required before implementation proceeds.

### **Outcomes/Benefits:**

- Stronger alumni and prospect ties to the University
- Improved information-dissemination vehicle
- Potential recruiting advantage by demonstrating institution's technical know-how

### **Responsibility:**

- DRIVEN BY: IT Governance Council (establish commitment and define project scope); Alumni Development, Admissions, HR, Student Development (requirements definition, system setup & testing, on-going system management)
- Academic Computing (application implementation and integration)
- Networking (hardware implementation and user account management)

### **Time Table:**

- Q4, 2000 – Evaluate alternatives and educate University of options
- Q1, 2001 – Define requirements and obtain University endorsement
- Q2, 2001 - Purchase and implement hardware and software

### **Budget (Capital vs. Operating):**

- Fiscal year 2001 ITS Operating budget to cover hardware purchase
- \$25,000 – portal software annual license (on-going)
- \$60,000 – additional, on-going resources in key departments to manage portal
- \$30,000 – Integration with Datatel and Blackboard (one time cost)

### **Evaluation/Measurement:**

- Best determined by key departments

Department-Driven IT Tactical Initiatives:

## **Expand Utilization of campus One Card system**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

### **Description:**

- There are several components of a successful One Card implementation that can be pursued at the University to leverage our investment more fully:
  - Migrate all meal plans to the University (requires collection of all funds in the Cashier's office)
  - Implement activities module to determine eligibility to and track attendance at the Rec Center, athletic events, student events, etc.
  - Configure hardware & software for use in the library and bookstore
  - Integrate One Card system fully with Datatel (meal plans; financial aid to bookstore interface; student, faculty and staff eligibility, etc.)
  - Collaborate with local vendors to allow One Card purchases at their stores

### **Outcomes/Benefits:**

- Greater convenience for the students
- Potential for additional revenue for the University

### **Responsibility:**

- DRIVEN BY: Student Development (project leadership, working with the team to set direction)
- One Card Team (involvement in and commitment to enhancements)

### **Time Table:**

- Yet to be determined

### **Budget (Capital vs. Operating):**

- \$ 10,000 (one-time) Additional software to handle activities and events
- \$ 15,000 (one-time) Integration of One Card system with Datatel
- \$ 3,000 (on-going) Additional hardware and software maintenance costs

### **Evaluation/Measurement:**

- Best determined by key departments (Student Development, Athletics, Library, Bookstore, Dining Services, ITS)

Department-Driven IT Tactical Initiatives:

## **E-Purchasing (on-line purchase requisitions)**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

### **Description:**

- Take advantage of the Datatel system capabilities to have departments enter purchase requisitions directly into the system. The approval process would take place on-line and once approved, Purchasing would turn into a PO.

### **Outcomes/Benefits:**

- Faster, more efficient approval and processing of requests
- Reduced data entry demands on the Purchasing department

### **Responsibility:**

- DRIVEN BY: Purchasing (research system capabilities and configure to Gannon's needs, train departmental users)
- ITS (provide technical assistance as needed through Datatel or Gannon staff)

### **Time Table:**

- To be determined by Purchasing

### **Budget (Capital vs. Operating):**

- \$ 5,000 (one-time) Anticipated consulting services from Datatel

### **Evaluation/Measurement:**

- Best determined by Purchasing

Department-Driven IT Tactical Initiatives:

## **University-wide Calendaring/Scheduling application**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

### **Description:**

- Implement a University-wide integrated calendaring/scheduling application that provides a common interface and platform that is shared across all departments.

### **Outcomes/Benefits:**

- Improved support staff efficiency
- Improved departmental and inter-departmental communications and collaboration

### **Responsibility:**

- DRIVEN BY: ITS (purchase evaluation and decision, equipment testing & implementation)
- Input provided by key administrative departments

### **Time Table:**

- Yet to be determined

### **Budget (Capital vs. Operating):**

- \$20,000 (one-time) - \$8000 for Server, \$900 for 2 Exchange 2000 Server licenses, \$3100 for 500 client access licenses, \$8000 for training for 2 staff
- Hardware maintenance – 3 year warranty on server
- \$5,000 (on-going) - Software maintenance/upgrade protection

### **Evaluation/Measurement:**

- Improved and simplified communications and scheduling
- Increased departmental collaboration

## D. ITS-Driven IT Tactical Initiatives

ITS-Driven initiatives foster a fundamental change in ITS operations and/or the technological infrastructure of the University. ITS benefits directly from the initiative by improved operational efficiency and resource utilization and all University technology users benefit from an enhanced infrastructure. Customers of the ITS department also benefit from improved services and streamlined interaction with ITS. These initiatives are lead and implemented by ITS, often with little or no effort from end-user departments. However, departments will likely be impacted by the implementation (outages, change in procedures, etc.).

### Priorities for fiscal years 2001 and 2002 (described in detail on following pages):

Current Priority	Initiative	FY 2002 Additional Budget Request	
		One-time	On-Going
Very High	Complete Network Upgrade - ITGC endorses pursuit of this initiative in FY2001	None	\$10,000
Very High	Establish PC Replacement cycle - ITGC endorses establishing a fixed replacement cycle with the number of years based on the available budget. Budget requests represent 3, 4 and 5 year cycles respectively.	None	\$170,000 \$105,000 \$60,000
Very High	Centralized PC Administration tool - ITGC endorses pursuit of this initiative in FY2002	\$2,500	\$7,500
High	Provide an instructor podium in every classroom - ITGC endorses pursuit of this initiative via fund-raising	None	\$180,000
High	Upgrade tiered classrooms - ITGC endorses pursuit of this initiative in FY2002	\$50,000	None
Moderate	Enable network access for every student in all classrooms - ITGC endorses a thorough evaluation and pilot project in FY2002	\$15,000	None

### Other initiatives (Very High/High priorities described in detail on following pages):

Current Priority	Initiative	FY 2002 Additional Budget Request	
		One-time	On-Going
Very High	Network printer replacement cycle - ITGC endorses evaluation and development of printing standards in FY2001	None	\$30,000
Very High	Network administration tools (track PC and network utilization) - ITGC endorses pursuit of this initiative in FY2002	\$10,000	\$15,000
Very High	Migration to Windows 2000 on all servers - ITGC endorses pursuit of this initiative in FY2002	\$23,000	\$5,000
High	Datatel hardware platform upgrade - ITGC endorses pursuit of this initiative in FY2002	\$50,000 approx.	None
High	Install UPS/Generator based power system for Zurn Machine Room - ITGC endorses pursuit of this initiative in FY2002	\$50,000 approx.	Unknown
Moderate	Lightning protection solution for Cable TV Headend equipment	\$ 12,000	None
Moderate	Upgrade PBX software to current software levels	\$ 20,000	\$4,000
Moderate	Establish an Instructional Technology group	None	None
Moderate	Replace aging copper cabling infrastructure	None	None
Moderate	Automate nightly Operations activities (including server backup)	None	None
Moderate	Implement print management system	None	None
Low	Review Cable TV programming & consider offering pay-per-view	None	None
Low	Assess feasibility of Voice over IP	None	None
Low	Assess feasibility of student and administration long distance via the internet	None	None
Low	Upgrade Videoconferencing capabilities	None	None
Low	Fully leverage network & server (centralized application delivery) capabilities	None	None
Low	Investigate migration to Oracle, a true RDBMS	None	None

ITS-Driven IT Tactical Initiatives:  
**Complete Network Upgrade**

**University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

**IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

**Description:**

- Replace all 3Com brand ATM equipment with Cisco brand gigabit Ethernet equipment. Design and implement a new internal IP addressing scheme. Design and implement a VLAN scheme that properly segments network activity.

**Outcomes/Benefits:**

- Increased network throughput (155 Mb/s → 1,000 Mb/s)
- Increased bandwidth to individual ports (less than 10 Mb/s → up to 100 Mb/s)
- Reduced network downtime

**Responsibility:**

- DRIVEN BY: Networking (project management, implementing Phases II & III)
- Consulting Partner (IP and VLAN design, core implementation)
- Departmental Server Administrators (facilitate server IP changes)

**Time Table:**

- Q4, 2000 – Project planning, IP & VLAN design, cable & closet evaluation
- Q1, 2001 – Phase I – Implement Zurn & Finegan core and Palumbo edge devices
- Q1, 2001 – Phase II – Implement edge devices in all administrative buildings
- Q2, 2001 – Phase III – Implement edge devices in all residence halls

**Budget (Capital vs. Operating):**

- \$320,000 financing in Q4, 2000 to fund all hardware and implementation costs
- \$10,000 project contingency reserved from PA Equipment Grant funds
- \$85,000 (on-going) annual financing - \$75,000 in Fiscal 2001-2004 ITS Operating budget plus \$10,000 request for additional funds

**Evaluation/Measurement:**

- Reduce # of unplanned network outages
- Number of high-bandwidth applications in use

ITS-Driven IT Tactical Initiatives:  
**Establish PC Replacement Cycle**

**University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

**IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
- Advance the culture of the University to take ownership of Information Technology. Provide tools for users to integrate and leverage Information Technology rather than services alone and develop a reward system to encourage users to demonstrate ownership.

**Description:**

- Establish on-going funding to facilitate replacing one-third of all PCs in centrally-supported student labs and one-third of all PCs on faculty/administrator desktops.

**Outcomes/Benefits:**

- Ensure all PCs can support the latest versions of critical software
- Improved ability to manage computing resources

**Responsibility:**

- DRIVEN BY: Academic Computing (project management, PC configuration and distribution)

**Time Table:**

- Summer, 2001 and every Summer thereafter

**Budget (Capital vs. Operating):**

- Approximately \$50,000 allocated to desktop and \$55,000 allocated to lab PC replacements in ITS FY2001 budget. Total funds needed for a 3 year cycle:
  - \$197,500 (on-going) Desktop PCs -- 158 systems X \$1250
  - \$77,500 (on-going) Lab PCs -- 62 systems X \$1250

**Evaluation/Measurement:**

- Reduced number of versions of supported software
- Reduced number of PCs greater than 3 years old

ITS-Driven IT Tactical Initiatives:

## **Centralized PC Administration tool**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
- Develop and support ITS staff by creating a progressive environment in IT, including platforms, tools and training.

### **Description:**

- Application that facilitates management of PC's in labs and desktops from a centralized location. Provides tracking of all University PC hardware and software assets automatically. Allows ITS staff to install or upgrade software on multiple PCs simultaneously. Improves ITS ability to provide user support quickly and efficiently from a central location and helps track utilization of University computing resources.

### **Outcomes/Benefits:**

- Improved efficiency of ITS staff
- Reduced risk through better tracking of software licenses
- Improved support experience by University PC users from ITS Help Desk

### **Responsibility:**

- DRIVEN BY: ITS (purchase evaluation and decision, testing & implementation)

### **Time Table:**

- Q2, 2001 Evaluate alternatives and make purchase decision
- Q3, 2001 Implement on approximately one-fourth of centrally-supported PCs
- Q3, 2002 – 2004 Implement on an additional one-fourth of PCs annually

### **Budget (Capital vs. Operating):**

- \$7,500 (on-going) annual license for 250 PC's (\$30 per PC)
- \$2,500 (one-time) for server
- Additional \$7,500 annually for another 250 PC's each year in FY2003, FY2004 and FY2005 until all PC's are covered

### **Evaluation/Measurement:**

- Reduced time to close Help Desk logs
- Increased number of PC users assisted during any given timeframe
- Improve accuracy of inventory information
- Improve ITS staff productivity

ITS-Driven IT Tactical Initiatives:

## **Provide Instructor Podium in every classroom**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Improve classrooms by integrating computing environments and learning environments (including wired classrooms, daises, acoustics, tables, chairs, etc.)
- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

### **Description:**

- Provide fixed projector and technology podium (digital dias) in all classrooms. An alternative for some areas would be to provide an ample number of portable carts, with essentially the same technology, to be shared among classrooms.

### **Outcomes/Benefits:**

- Offer more options to faculty presenters
- Improve presentation quality

### **Responsibility:**

- DRIVEN BY: ITS (purchase decision, equipment testing & implementation)

### **Time Table:**

- Install 15 new podiums prior to the start of the Fall semester in 2001, 2002, 2003 and 2004 to complete all of the 60 remaining classrooms

### **Budget (Capital vs. Operating):**

- Approximately \$36,000 allocated to instructor podiums in ITS FY2001 budget. Total funds needed to equip every classroom over next 4 years:
  - \$180,000 (on-going) 2002-2005 - podiums for 15 classrooms per year
  - \$100,000 (on-going) 2006 and thereafter - 5 year replacement cycle

### **Evaluation/Measurement:**

- Increased number of course taught using technology

ITS-Driven IT Tactical Initiatives:  
**Upgrade Tiered Classrooms**

**University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

**IT Strategic Initiative(s):**

- Improve classrooms by integrating computing environments and learning environments (including wired classrooms, daises, acoustics, tables, chairs, etc.)
- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

**Description:**

- Replace projectors, PC's, and lenses in Palumbo 1200, 3205 & 3208

**Outcomes/Benefits:**

- Improve image clarity
- Offer more software options to faculty presenters
- Decrease support needs; improve reliability

**Responsibility:**

- DRIVEN BY: ITS (purchase evaluation and decision, equipment testing & implementation)

**Time Table:**

- Completed for start of Fall, 2001 semester

**Budget (Capital vs. Operating):**

- \$16,725 per room; \$50,175 total for 3 rooms (one time cost with review of equipment determining replacement in 3 years)

**Evaluation/Measurement:**

- Increased number of classes taught in tiered classrooms

ITS-Driven IT Tactical Initiatives:

## **Enable network access in all classrooms**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Improve classrooms by integrating computing environments and learning environments (including wired classrooms, daises, acoustics, tables, chairs, etc.)
- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

### **Description:**

- Provide access to Gannon's network and the Internet to every student and faculty member in every classroom (one-to-one port-to-seat relationship). Evaluate cost, functionality and feasibility of wireless vs. wired options.
- An analysis of the available alternatives and feasibility of this initiative will be conducted, then endorsement from the IT Governance Council and President's staff will be required before implementation proceeds.

### **Outcomes/Benefits:**

- Provide flexibility to faculty to utilize network and internet resources during class.
- Instruction currently restricted to computer labs can take place in any classroom.

### **Responsibility:**

- DRIVEN BY: IT Governance Council (establish University commitment); Networking (evaluate options solution and lead implementation)
- TLTR (evaluate instructional benefits of each option)
- Deans (curriculum redesign to take advantage of network availability)

### **Time Table:**

- Q2, 2001 Research options
- Q3, 2001 Implement pilot(s) for faculty evaluation during Fall, 2001 semester
- Q4, 2001 Evaluation by IT Governance Council and Provost's Council
- Q1, 2002 Begin full-scale implementation project

### **Budget (Capital vs. Operating):**

- Wireless:
  - \$112,500 (\$1,500 per base station X 75 classrooms)
  - \$742,500 (\$225 per laptop antenna card X 3,300 students)
- Wired:
  - \$703,125 (\$375 per drop X 25 seats per class X 75 classrooms)
  - \$75,000 (contracted staff to pull and terminate cable drops)

### **Evaluation/Measurement:**

- Number of ports per seat
- Increased number of technology-driven courses

ITS-Driven IT Tactical Initiatives:  
**Network Printer Replacement Cycle**

**University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

**IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

**Description:**

- Establish 6 year replacement cycle for network printers
- Establish guidelines for placement, location, and capabilities of network printers

**Outcomes/Benefits:**

- Ensure access to quality printing resource to all faculty & staff
- Control printer costs by sharing resources
- Maintain adequate level of print capabilities uniformly across the campus

**Responsibility:**

- DRIVEN BY: ITS
- Approval from ITGC

**Time Table:**

- Q4, 2000 – Propose guidelines and schedule to ITGC
- Q1, 2001 – Determine specific sequence and timetable for replacements
- Q2, 2001 -- Work with Purchasing to enforce hardware standards

**Budget (Capital vs. Operating):**

- \$30,000 (on-going) \$1,500 per printer X 20 printers per year

**Evaluation/Measurement:**

- Decrease in number of desktop printers
- Stability in number of network printers

ITS-Driven IT Tactical Initiatives:

## **Network Administration Tools**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
- Develop and support ITS staff by creating a progressive environment in IT, including platforms, tools and training.

### **Description:**

- Implementation of server management software to administer and manage the network and NT domain more effectively

### **Outcomes/Benefits:**

- Accurately manage and monitor server performance and load
- Accurately manage user load and services
- Integrate with desktop management software to create a secure and consistent network environment for faculty, staff, and students

### **Responsibility:**

- DRIVEN BY: ITS (evaluate options, purchase and implement system)

### **Time Table:**

- Q1, 2001 – evaluate vendor options and select best option
- Q2, 2001 - plan for summer 2001 pilot implementation
- Q3, 2001 -- implement for core servers and 250 workstations
- Q2, 2002 -- expand to 500 workstations and all servers

### **Budget (Capital vs. Operating):**

- \$10,000 (one-time) initial investment for server, console, and software
- \$15,000 (on-going) annual license fee for 500 nodes

### **Evaluation/Measurement:**

- Degree of consolidation of network services
- Improved server performance

ITS-Driven IT Tactical Initiatives:

## **Migration to Windows 2000 on all servers**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
- Develop and support ITS staff by creating a progressive environment in IT, including platforms, tools and training.

### **Description:**

- Upgrade current Windows NT 4.0 Server environment to Windows 2000 Server with Active Directory

### **Outcomes/Benefits:**

- Current Technology
- Greatly improved resource management interface (user account management, file and print services, and scalability)

### **Responsibility:**

- DRIVEN BY: ITS (manage implementation, communicate impact to users, configure features of system to best meet University needs)

### **Time Table:**

- Q1, 2001 – Complete evaluation and planning
- Q2, 2001 - Conduct implementation

### **Budget (Capital vs. Operating):**

- \$23000 (one-time) - \$1700 for 10 Windows 2000 Server licenses, \$10000 for server memory and/or hard drive upgrades, \$3300 for 400 client access licenses, and \$8000 for training for 2 staff
- \$5,000 (on-going) - Software maintenance/upgrades

### **Evaluation/Measurement:**

- More efficient server resource management

ITS-Driven IT Tactical Initiatives:

## **Datatel Hardware Platform Upgrade**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.
- Develop and support ITS staff by creating a progressive environment in IT, including platforms, tools and training.

### **Description:**

- Current hardware is nearly 3 years old and performance is only fair. The complexity of the database structure on Release 16 require much more processing capacity to perform queries than was needed in the past. Also, desire to allow student access to information via the web will place many additional demands on system performance.

### **Outcomes/Benefits:**

- Improved efficiency by users through faster queries and screen processing.
- Improved system stability (less unplanned downtime).
- Additional capacity to increase utilization of the system.

### **Responsibility:**

- DRIVEN BY: ITS (hardware and vendor selection, migration planning and implementation)

### **Time Table:**

- Q2, 2001 – Evaluation and selection
- Q3, 2001 – Purchase and implementation

### **Budget (Capital vs. Operating):**

- \$50,000 (one-time) hardware purchase [approximate cost - additional research to be done]

### **Evaluation/Measurement:**

- Decreased run-time for complex queries
- Decreased number of unplanned system outages

ITS-Driven IT Tactical Initiatives:

## **Install UPS/Generator based power system for Zurn machine room**

### **University Planning Theme(s):**

- Continuous Program Improvement; Information Technology

### **IT Strategic Initiative(s):**

- Continually maintain and upgrade the technical infrastructure of the University (network, cable plant, servers, PCs, software applications, etc.) to keep current with technological advancements, vendor support levels and department objectives.

### **Description:**

- Implement a UPS/Generator-based power system to support all of the critical equipment and systems in the Zurn Machine Room to prevent catastrophic system crashes due to power outages

### **Outcomes/Benefits:**

- Increased system availability
- Critical systems protected from crashes/improper shutdowns during extended power outages

### **Responsibility:**

- DRIVEN BY: ITS - Networking (Project planning, Vendor integration, cutover)
- Campus Services – facility preparation, coordination for cutover

### **Time Table:**

- Q3, 2001 – Evaluation of alternatives, selection and planning
- Q4, 2001 – Facility preparation
- Q1, 2002 - Equipment purchase and implementation

### **Budget (Capital vs. Operating):**

- \$50,000 (one-time) hardware purchase and implementation [approximate cost - additional research to be done]
- \$\$\$\$ (on-going) some annual costs are anticipated but cannot be estimated at this time

### **Evaluation/Measurement:**

- Decreased number of system or network outages due to power surges or interruptions.

# Section IV. Appendices

## A. Information Technology Governance Structure

There are three standing committees at the University involved in the implementation of Information Technology solutions. The IT Governance Council (ITGC) provides leadership and guidance to President's Staff on institution-wide issues pertaining to Information Technology. Leadership from many areas of the campus are represented on the ITGC. There are also two action teams that deal with academic and administrative technology issues respectively; each is empowered to implement recommendations as they are able. Recommendations that require resource allocation or approval University-wide are forwarded to the ITGC for review. Each group meets monthly and forwards minutes from their meetings to the entire ITGC.

- The Teaching and Learning Technology Roundtable (TLTR) is co-chaired by the Assistant Director for Academic Computing and the Associate Provost. The TLTR provides leadership and guidance with respect to academic technology.
- The Administrative Computing committee, chaired by the Assistant Director for Administrative Computing provides leadership and guidance with respect to administrative uses of technology.

Charter and current membership of each standing committee is included on the following pages.

## **B. Charter of the Information Technology Governance Council**

The Information Technology Governance Council is responsible for providing leadership and guidance on all institution-wide issues pertaining to computers and networks (including data, voice and video). There will be two permanent subsidiary committees of the Council: the Teaching and Learning Technology Roundtable (TLTR) and the Administrative Computing Committee. Those committees shall forward to the Governance Council recommendations as well as issues that touch upon the Council's scope of responsibility, issues that are deadlocked within one of the committees or issues that affect the other committee. The Governance Council will inform those committees of its decisions and disposition of recommendations and issues forwarded.

Council membership will consist of representatives of all major academic and administrative functions that use computing, the Director of Information Technology, and the chairs of the TLTR and the Administrative Computing committees. The Council will meet monthly throughout the academic year. The Council may at its discretion form permanent and ad hoc subcommittees.

The scope of responsibility for the Information Technology Governance Council includes the following:

- Setting institution-wide policies and procedures for computing and telecommunications
- Developing short and long term technology objectives and plans and prioritizing these
- Defining the scope of services to students, faculty and staff
- Issuing business recovery policies and procedures for the computer and telephone systems
- Resolving conflicting issues forwarded by other committees
- Informing all affected parties of the Council's decisions and plans

Committee Members:

- Steve Schillo, VP, Finance & Administration (Facilitator/Co-Chair)
- Mark Jordano, Director, ITS (Co-Chair)
- Dr. Ken Andersen, Acting Dean, Science, Engineering and Health Sciences
- Dr. Gregor Reinhard, Dean, Humanities, Business and Education
- Ward McCracken, Dean, Student Development
- Susan Black-Keim, VP, University Advancement
- Dr. Mehmet Cultu, Associate Provost
- Dick Sukitsch, Director, Institutional Research
- Marion Gallivan, Director, Library
- Dr. Terry Giles, Dean, Graduate Studies
- Cynthia Duda, University Advancement
- Sr. Lynette Petruska, Chaplain
- Patricia Benekos, Assistant Director of Academic Computing
- John Crandall, Assistant Director of Administrative Computing
- Steve Glover, Assistant Director of Networking
- Student Government Association Representatives:
  - Franco Lacey, Kristin Paul, Erin Williams
- Dave Rosswog, Graduate Student

### **C. Charter of the Teaching and Learning Technology Roundtable**

The Teaching and Learning Technology Roundtable (TLTR) is an advisory group responsible for providing leadership and guidance with respect to faculty and student uses of academic technology. The TLTR will generally meet monthly during the academic year and may at its discretion form permanent and ad-hoc subcommittees.

The TLTR is under the jurisdiction of the Information Technology Governance Council, and shall forward to that Council policy and funding recommendations as well as issues that touch upon the Council's scope of responsibility, issues that are deadlocked within the Committee, or issues that affect the Administrative Computing Committee.

The scope of responsibility for the TLTR includes the following:

- Promoting student and faculty uses of academic technology
- Serving as a two-way communication vehicle between the committee and the academic community, informing all affected parties of the committee's decisions and plans and bringing input from faculty and students
- Providing input to short and long term plans for academic technology
- Investigation and recommending technologies to be utilized in instruction
- Recommending policies pertaining academic technology to the Governance Council
- Setting standards for academic technology usage (hardware and software)
- Recommending standards and procedures for providing services to users of supported hardware and software
- Approving priorities and plans for major projects of Academic and User Services, based upon institutional needs and availability of resources

Committee Members:

- Patricia Benekos, Assistant Director of Academic Computing (Facilitator/Co-Chair)
- Dr. Mehmet Cultu, Associate Provost (Facilitator/Co-Chair)
- Dr. Robert Brooker, Business
- Dr. Michael Bucholz, Chemistry
- Colleen Cipriani, Graduate Studies
- Charles Cornfield, Respiratory Care
- Mary Crane, Business
- Dr. Rick Diz, Environmental Science
- Lisa Campbell, Student Organizations & Leadership Development
- Mary Carol Gensheimer, Communication Arts
- Sarah Drexler, Development
- Dr. Charles Elliot, Education
- Marion Gallivan, Library
- Dr. Kate Marsters, English
- Dr.Carolynn Masters, Nursing
- Dr. Theresa Vitolo, Computer & Information Sciences
- Sarah Hinchberger, Student Government Association
- Dan Giannelli, Information Technology Services
- John Crandall, Facilitator/Chair of the Administrative Computing Committee

## **D. Charter of the Administrative Computing Committee**

The Administrative Computing Committee is an advisory group responsible for providing leadership and guidance with respect to technology used in Administrative areas. The committee will generally meet monthly throughout the year. The Committee may at its discretion form permanent and ad-hoc subcommittees.

The Committee is under the jurisdiction of the Information Technology Governance Council, and shall forward to that Council policy and funding recommendations as well as issues that touch upon the Council's scope of responsibility, issues that are deadlocked within the Committee, or issues that affect the Academic Technology Action Committee.

The scope of responsibility for the Administrative Computing Committee includes the following:

- Reviewing, investigation, and recommending institution-wide administrative software
- Developing policies and procedures regarding usage of data (security and standards)
- Approving plans and dates for major system implementations and upgrades
- Prioritizing programming and other project requests based upon institutional needs and availability of resources
- Developing and overseeing policies related to data retention
- Developing mission-critical support plans
- Recommending minimum requirements and standards for office devices using administrative systems (hardware, software, network connections, printers, etc.)
- Informing all affected parties of the committee's decisions and plans

Committee Members:

- John Crandall, Assistant Director of Administrative Computing (Facilitator/Chair)
- Valerie Bacik, Institutional Research
- Sharon Krahe, Financial Aid
- Marilyn Dombrowski, Student Registration
- Carolyn Ross, Student Accounts
- Laurie Bednar, Admissions
- Barb Sambroak, Finance and Purchasing
- Jay DiFrank, Human Resources
- Cynthia Duda, University Advancement
- Michael O'Neill, Academic Affairs
- Patricia Benekos, Facilitator/Chair of the Teaching and Learning Technology Roundtable

Ad-Hoc Members:

- Ward McCracken, Student Development
- Ellen Schumann, Student Living
- Beth Shick, Student Organizations and Leadership Development