

Information Technology Plan **2010-11 to 2012-13**

12/1/2009

Lock Haven University of Pennsylvania

Donald Patterson, IT Director

Mission Statement

The mission of Information Technology is to provide infrastructure and technology solutions to help achieve the goals of the institution, students, faculty and staff.

To accomplish this mission, the IT Department efforts are focused on the following goals:

- Maintain and operate the existing Information Technology infrastructure and workstations with priority on mission-critical systems.
- Investigate and implement new technologies that support the academic mission and administrative functions of the University.
- Establish long-term infrastructure and equipment life-cycle planning to balance performance needs with fiscal responsibility.
- Provide a user support mechanism that ensures timely request resolution with minimal interruption to the working and learning environment.

Functional Organization

IT Director

Responsible for the management of the Information Technology department. This includes planning and budget management. Oversees all computer operations including all desktops and servers, classroom technology, ERP systems, computer labs, television studio, radio station and duplicating operations. Supports all student computing. Develops policies and procedures for operations.

Director of Administrative Computing

Responsible for planning, development and operation of Administrative Computing systems including the Student Information System and its interface with the PASSHE ERP and other external organizations.

Information Resource Manager

Responsible for the daily operation and system maintenance of the campus SIS software and hardware. Functions as the information security officer and supervises the operations and duplicating staff.

Distributed Systems Manager

Responsible for the planning, development and operation of core application services (file/mail/web/print/directory services). Also oversees the helpdesk and end-user support technicians, as well as the core server administration staff.

Network Administrator

Manages the campus data networking equipment and physical communications infrastructure. Also supervises personnel responsible for classroom technology, performing arts technical support, broadcast studio support and campus television.

Telecommunications Manager

Responsible for campus wireline and wireless voice communication services, external circuit procurement and management and card-access door security system. Supervises one employee responsible for supporting end-user voice devices, moves/adds/changes, and provisioned service recordkeeping.

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Current Environment

- Major service contracts and operating expenses paid from departmental operating budget (with exception of Student Information System maintenance contract, which is funded through a separate nondiscretionary fund center).
- Obsolescence upgrades/replacements funded through technical obsolescence fund
- Classroom technology and some student-oriented technologies funded and maintained using student Tuition Technology Fee revenues.
- Infrastructure build outs in new/expanded facilities are generally associated with the capital or building project and purchased through the Facilities department on the project budget.
- Declining operating budgets along with increased demand for services have required the department to migrate towards a virtualized cloud environment. This environment is sized to meet today's needs and can be expanded as demand requires with little effort and projectable costs.
- The networking and telecommunications environment, while adequate today, will soon be in need of upgrades and renewed maintenance contracts. A funding source will need to be identified as the maintenance costs will likely exceed \$150,000 per year. Because demand drives capacity and vendor pricing varies wildly, it's not possible to accurately estimate what any networking and communications infrastructure upgrade may cost.

Major Goals / Next 3 yrs.

- Implement chargebacks for student printing and provide options for color and duplex formatting.
- Establish permanently unique usernames for student accounts.
- Outsource student email.
- Provide and enhance Jenzabar CX reporting via web-based tools.
- Enhance work request system to include system inventory and history.
- Design and implement new residential network access system to enhance student computing experience.
- Rollout Jenzabar Internet Campus Solution Portal to the campus community.
- Migrate remaining servers where possible, as well as selected desktops including computer labs, to VMWare cloud.
- Collaborate with Facilities to design and utilize new Fiber-Optic infrastructure.
- Standardize voicemail on a common platform to streamline system operations and enhance user access options.
- Engage in professional development opportunities and training to maintain operational skills and awareness of current industry trends and products.
- Continue to enhance and expand wireless connectivity in academic structures.
- Streamline duplicating operations to provide extended customer service and realize hardware efficiencies through extended usage hours.
- Conduct disaster recovery/business continuity study.
- Enrich the depth and breadth of the department commensurate with industry best practices and institutional demand through enhanced departmental complement.

List of Major Projects Planned

- VMWare expansion - \$150,000 over a three year period
- CallManager Upgrade and Voicemail Optimization - \$40,000
- Online course/faculty evaluation software - \$15,000 initial cost + annual maintenance
- Test scoring scanner replacement - \$40,000 estimated
- Network Access Control upgrade - \$90,000
- Core network routing/switching/security upgrade - \$200,000 over a three year period
- Large section classroom technology - \$200,000

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Metrics

The Information Technology Department gauges end-user satisfaction with requests and general system operability. All work orders are status time stamped and tracked by technician and type of issue. This allows the department to measure and improve on completion time where possible. Because outside forces can impact completion time, especially with networking requests, this metric may be significantly skewed for some request types.

In addition to completion time, all work requests are followed by a satisfaction survey at the completion of the work request. While the majority of requestors choose to not complete the survey, those that do provide feedback on customer service that is useful both specifically and statistically.

Recently, the department deployed a problem reporting tool for issues not requiring a work order that provides feedback on the performance and operability of central networking and applications services. At this point, the data is being used for problem mitigation and analysis, but no statistical data has been compiled. In the near future, this tool will be enhanced to retain a historical database collecting specific data points that can be used for future performance analysis.

Complementary, but separate from any user satisfaction index, the networking group does maintain historical data regarding usage related to capacity of critical network links and external circuits. At the current time, there is adequate capacity on all parts of the internal network to carry the present-day throughput. While Internet throughput can run very close to full capacity, selective shaping and prioritizing of academic traffic over recreational traffic has addressed this situation. Should the need become necessary, this system has the capability to monitor and maintain history regarding the performance of the virtual server cloud.

The administrative computing group internally monitors the performance of the Student Information System servers. A listing of pending system maintenance orders (SMOs) is maintained by this group, and a backlog metric may be provided at any time by request.