Troy University
Office of Information Technology

2013-2014
Technology Plan

Using Technology as a Strategic Enabler
“The best way to predict the future is to create it.”

-Peter Drucker

Technology Planning Process: Seeking Opportunity, Embracing Change

Change in technology is a certainty. The benefits of technology are indisputable. Seeking a method to align technology needs and resources in an ever-changing landscape is analogous to shooting a moving target. One knows the goal and expectation, yet, how does one adapt to the changing environment?

Very simply, planning – planning based on realistic goals, with an appreciation of the dynamics of the situation. If we are to employ the advantages of technology on behalf of the University, we must plan.

The technology planning process at Troy University is a collaborative effort focusing on need. Often, we refer to the effort as a solutions-based approach. We seek solutions first. Then, apply technology to foster realization of the goal.
Purpose of Technology Plan

Technology is an essential component of the day-to-day operations of the University. The purpose of the Office of Information Technology is to leverage technology to support the University’s mission and strategic plans. The technology plan is an instrument that clearly establishes the connection between technology efforts and the University’s strategic initiatives. The plan is the result of collaborative efforts to ensure that technology is best employed for overall institutional effectiveness. The inclusive process is a structured approach for comprehensive buy-in of key institutional leaders—a synchronous process whereby IT seeks understanding of divisional needs while presenting an accurate depiction of IT landscape, including resource availability and infrastructure capacity.

The collaborative effort focuses on need—a solution-based approach. IT discusses University need, reviews technology offerings and assists in the design of a flexible, effective plan that is congruent with infrastructure and resources. The focus on need rather than technology facilitates the proper adoption of a product.

A technology plan that is based on University need, developed through constituent collaboration and seeks solutions based on known resources yields a malleable IT environment. By capitalizing on integrated systems that serve comprehensive needs, rather than ad-hoc, localized solutions with myopic goals, IT can deliver solutions that work efficiently and effectively.
**IT Mission**

The IT department will support the mission of Troy University by providing efficient, readily-available technology to the University system. IT endeavors to maintain flawless, constantly-available electronic resources and support mechanisms. To this end, IT actively investigates new technologies and structures to facilitate realization of the University's mission.

**IT Duties/Competencies**

IT is divided into several functional areas:
- Administrative Computing - ERP, SIS system management and maintenance
- Academic Computing - Student CIS software/server management
- Systems Development - Enterprise-level system administration, design and maintenance
- Network Services - Enterprise-level network administration, design and maintenance
- Technical Services - PC hardware support, Microsoft Software support, end-user training, solution development
- Policy Development/Maintenance – Creation and enforcement of IT policy
- IT Security – Development and Vigilance of IT assets and resources
Guiding Principles

The University does not possess unlimited resources. Therefore, the technology plan offers structure that will facilitate proper solicitation of technology solutions.

Standards/Commonality

Troy University is committed to employing common tools across the IT infrastructure. The use of common standards and tools is a significant benefit to the University:

- Reduces need for complex support mechanisms
- Facilitates common knowledgebase, greater expertise of personnel
- Allows for sharing in common formats, avoiding conversion
- Confidence in use of common applications
- Common application training program
- Reduction of downtime
- Improves reliability and integration of systems
- Reduces security review
- Reduces cost of ownership

The technology standards policy is available at https://it.troy.edu/Policies/standards_policy.htm.

Security

Troy University endeavors for a safe, secure computing environment for its constituents. Security policy and standards are reviewed by the IT security team. A strict adherence to usage policy is observed. The policy is available at https://it.troy.edu/Policies/tech_policies.htm.

Electronic Communications – Email

Troy University maintains one email system for all University constituents. The email system is the official means of communications with students. In an effort to maintain an efficient and productive electronic collaboration environment, a unified email system will be maintained by IT for all University constituents.

Core Database – ERP System

Troy University ensures data security, integrity, privacy and accuracy of data elements. The core database is used to produce all institutional reports, or, offer data for approved complementary systems that enhance University efforts. The ERP system is Datatel.
New Technology Adoption

Review of all new or significantly enhanced technology efforts will be reviewed by the Technology Infrastructure Coordination Team. The team will evaluate the need for personnel, compatibility with existing infrastructure and alignment with University goals during the review process. The technology plan strives for comprehensive solutions – ad-hoc solutions often create disparate, poorly-secured systems that do not address institutional need completely.

Access to Technology

Troy University IT will strive to provide ubiquitous access to IT resources.

Technology Use

Technology will be viewed as an enabler for accomplishing University goals in learning, research and the conduct of university business. Technology usage policies are available at https://it.troy.edu/Policies/tech_policies.htm.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Strategic Initiative</th>
<th>Notations/Description</th>
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<tbody>
<tr>
<td>Create and update IT technology plan and policies.</td>
<td>Strengthening the Infrastructure</td>
<td>Create comprehensive plans and policies for IT. The plans and policies will provide cohesive, concise computing environment.</td>
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<tr>
<td>Improve IT communications and efficiencies</td>
<td>Strengthening the Infrastructure</td>
<td>Continue single reporting systems for IT issues, single reporting structure, continued IT newsletter updates.</td>
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<tr>
<td>Review and evaluate needs for compliance to best practices and legislation.</td>
<td>Strengthening the Infrastructure</td>
<td>Review PCI, HIPPA, FERPA, and new archive legislation for ongoing compliance in IT.</td>
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<tr>
<td>Improve ERP, SIS system</td>
<td>Strengthening the Infrastructure</td>
<td>Web GUI for ERP, Entrinsik install, associated printing and data mechanisms, enhance backup routines.</td>
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<tr>
<td>Upgrade data security efforts</td>
<td>Strengthening the Infrastructure</td>
<td>Efforts include centralization of all major systems and data warehouses, perimeter security enhancements, LAN login, VPN upgrade</td>
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<tr>
<td>Enhance administrative systems</td>
<td>Strengthening the Infrastructure</td>
<td>Efforts include ongoing systems maintenance and upgrade, non-SIS system upgrade and installation</td>
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<tr>
<td>Enhance administrative network infrastructure</td>
<td>Strengthening the Infrastructure</td>
<td>Efforts include network hardware upgrade, telecommunications plant enhancement, wireless network enhancement</td>
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<tr>
<td>Increase IT training offerings</td>
<td>Strengthening the Infrastructure</td>
<td>Continue refining and developing IT end-user training for common desktop applications</td>
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<tr>
<td>Enhance internal communications systems</td>
<td>Strengthening the Infrastructure</td>
<td>Enhancement of intranet, emergency notification systems, HERMES, Ad-Hoc desktop videoconferencing</td>
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<tr>
<td><strong>Enhance academic computing facilities</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Efforts include upgrade of IT-supported labs and classrooms, improve systems associated with Blackboard and other academic systems</strong></td>
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<td><strong>Enhance community offerings</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Efforts include IT forensics facility, CyberKids initiative, safe-computing newsletters</strong></td>
</tr>
<tr>
<td><strong>Operate Computer Forensics Institute</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Continue law enforcement training and lab initiatives in Fall 2013, Spring 2014 start video research component</strong></td>
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<tr>
<td><strong>Complete Recruiter CRM Install</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Spring 2014 launch date</strong></td>
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<tr>
<td><strong>Upgrade WAN bandwidth</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Upgrade bandwidth at Troy, Montgomery, Dothan, SER to larger Metro-E connections</strong></td>
</tr>
<tr>
<td>**Continue new paperless solutions, Troy 2.7 ***</td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Implement new EchoSign for e-signature and paperless workflows</strong></td>
</tr>
<tr>
<td><strong>Review major contracts</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Review comprehensive technology contract, cellular contract, telecommunications contract</strong></td>
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<tr>
<td><strong>Enhance new IT facility</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Increase partnerships with state and local government for cloud services</strong></td>
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<tr>
<td><strong>Deploy new web offerings</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Deploy new <a href="http://www.troy.edu">www.troy.edu</a> website, new hosting solution, new DNS servers, consolidate all web servers to single VPS hosting environment; Portal and LLP launch</strong></td>
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<tr>
<td><strong>Enhance reporting portal</strong></td>
<td><strong>Strengthening the Infrastructure</strong></td>
<td><strong>Launch new reporting portal and Synoptix software for Admin needs</strong></td>
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</table>
University-wide objectives, updated through August 2013

*2.7 Objective

Harness process improvements and information technology to achieve a streamlined paperless system.

A full-scale plan was developed January 2011. Though, deployment will be an ongoing process, which will be completed as each form is deployed. The progression of the project will depend heavily on the funding based on the 2.7 Pro Forma.

2.7.1. Complete audit and inventory of current paper forms and associated workflows by March 2011.

Yellow. The audit and inventory of current paper forms and workflows began May 2010. *Forms will be reviewed as new forms are added or updated.

2.7.2. Review inventory report and assess viability of electronic workflow implementation and potential process change by June 2011.

Green Inventory review was completed October 2011 and ongoing.

EchoSign: Faculty Adjunct contract Phase 2 has been completed and the second round of contracts have gone out. Final stage of the travel approval form is beginning reviewed by Finance, and the adjunct evaluation form is in the final stage of development.

Automated workflow for the Leave request, Incomplete Grade form, Acknowledgement, Recommendation, Asset Pickup and Delivery, and Faculty leave request form have been deployed.

Workflows deployed: 7
Under review: 10

Web Development: 44 new forms and information processing systems

2.7.3. Establish costs estimates for technology and training.

Green Please see the Pro Forma 3.1, Y1.

EchoSign is one of the paperless products selected in the process. The estimated annual cost will be $17,500.00. Troy currently has an online training portal, which will be leveraged during the deployment process.
A new eSystems employee hired in January 2012 based on recommendation from the group.
The employee has conducted end-user training and began the review process of additional forms.

2.7.4. Deploy pilot program and assess success of 3 key workflows by December 2011.

Green. EchoSign: 4 new forms are complete ready for testing.
A new forms server is being deployed in an effort to assist in the form consolidation.
*Forms will be reviewed as new forms are added or updated.

2.7.5. Develop plan for full-scale deployment and training based on assessment of pilot program and financial viability by June 2012.

Green. A full-scale plan was developed January 2011. Though, deployment will be an ongoing process, which will be completed as each form is deployed. Three types of training sessions will be completed; group presentations, one of one training based on form selection, and online user guides.

2.7.6. Assess success of programs’ implementation by December 2012.

Yellow. This will be an ongoing process, which will be completed as each form is deployed.

3.1 Objective

3.1 Maintain a leadership position in sustaining information technology resources and adopting new learning technologies.

The goals for the objective were created; a work team was established within the IT unit. The IT work team devised a plan. The plan has been put in movement and the review phase has been completed.


3.1.1. Review current IT environment and document current areas of strength and areas that need improvement

Yellow. Completed review of current areas of strength and areas that need improvement.

**Areas of Improvements**: Network Infrastructure Upgrades, ERP Ad-hoc reporting system, Web design, Telephony integration across campuses/regions, and Ad-hoc Videoconferencing

3.1.2. Assess potential technology improvements to address areas of improvement

**Green.** Network engineers, systems engineer will work with IT staff and IT-discussion groups to assess the proper technologies to address the areas of improvement. Additionally, a variety of university committees and groups have been asked to submit technology suggestions. Finally, the annual IT summit provides significant opportunity for vendors and employees to discuss new technologies’ potentials.

3.1.3. Establish costs estimates for technology enhancements and training needs

a. Key mandates include flexible, secure infrastructure
b. Global operations require further review for legal and security concerns
c. Training considerations – should compulsory training be implemented
d. Are there IT staffing needs for continued growth and competitive posture?

**Yellow.** Please see the Pro Forma 3.1, Y1. The progression of the project will depend heavily on the funding based on the Pro Forma

3.1.4. Rank areas of improvement based on a needs analysis

**Yellow.**

1. ERP Ad-hoc reporting system
2. Network Infrastructure Upgrades
3. Ad-hoc Videoconferencing
4. Web design
5. Telephony integration across campuses/regions

3.1.5. Deploy improvements based on level of criticality

**Yellow**

1. ERP Ad-hoc reporting system
2. Network Infrastructure Upgrades
3. Ad-hoc Videoconferencing
4. Web design
5. Telephony integration across campuses/regions

3.1.6. Assess success of programs’ implementation

**Yellow**

1. Web design – Effort to deploy Recruiter and transition [www.troy.edu](http://www.troy.edu) to Troy
data center are underway. New design for hub accepted and deployment plan is being developed. HERMES site was launched, offering consolidated electronic communications venue.

2. Network Infrastructure Upgrades - in progress, architecture completed, bandwidth funding request submitted
3. Wireless Network Enhancements – Complete, outdoor Wi-Fi under review
4. Internet Access Enhancements - Complete
5. ERP Ad-hoc reporting system - in progress, surveys under review and work day scheduled with IT reporting team
6. Ad-hoc Videoconferencing – Complete
7. Telephony integration across campuses/regions - in progress, funding request under review; Adutante solution purchased for call quality assurance with e-Campus support unit