

# **INFORMATION TECHNOLOGY DIVISION STRATEGIC PLAN**

## **MISSION STATEMENT**

The Information Technology Division provides reliable, contemporary, and integrated technology to enable teaching, learning, research, and service.

## **VISION STATEMENT**

The Information Technology Division will be a recognized center of excellence in leveraging information technology to stimulate the exchange and creation of knowledge. Information will exist in an integrated environment that fosters an open, collaborative, and unifying culture.

### **Information Technology is committed to the values of**

- reliability;
- professionalism and integrity;
- efficiency and effectiveness;
- innovation;
- excellence; and
- collaboration and teamwork.

## **GOALS, CRITICAL SUCCESS FACTORS, and OBJECTIVES (including Strategies and Assessments)**

**Goal 1. Access and Technology: Create a technology-enriched environment for learning that is both effective as an aid in supporting the experiences of teaching and learning and is instructive by reflecting the technology environment graduates will work in after leaving TTU.**

**Critical Success Factors** (*measures the degree of success over the next 5 years*):

- Make the Internet the basic vehicle of service delivery, and ensure appropriate student services are available through the Internet.
- Deliver Internet-based student-recruiting tools to provide a competitive advantage for TTU.
- Double the amount of public access computing areas for TTU students, including workgroup settings in common areas.
- Develop a complete, integrated portal solution for students, employees, faculty, and applicants.
- Create a secure wireless network to serve at least 50% of campus.
- Keep networks' speed, security, and capability contemporary.
- Achieve efficiencies through e-Commerce.
- Expand the amount of information available on demand to students, faculty, employees, and stakeholders on the Web.
- Expand the number of technology-enabled classrooms by 100%.
- Provide 25% of all Internet services through portable devices.
- Provide technology-based support and integration for distance and lifelong learning, remote sites and campuses, community college partners, and regional development efforts.
- Integrate and leverage IT resources at TTU.
- Use technologically delivered information strategically and as a tool for institutional management.

**Objectives:**

***Objective 1.1: Deliver students access to technology.***

Strategies:

- Create fully supported, 24x7 student computer access areas supplied with contemporary equipment and software within a 5-minute walk from any on-campus residence location, and provide appropriate access for students using their own devices to make contact with networks from off campus.
- Create similar areas configured for workgroup rather than individual use. Also make contemporary computing and networking tools for collaboration available ubiquitously to students for creating workgroups at a distance.
- Use wireless and other technology to bring network access via portable devices to all appropriate classrooms and other campus locations.
- Use site licensing to leverage buying power and keep the software available for students and faculty state-of-the-art.
- Establish relationships with vendors that leverage the buying power of Texas Tech to create opportunities for students to acquire computers, PDAs (Personal Digital Assistants), and other technology at attractive pricing.
- Provide students access to portal technology, high-volume access to network storage, and collaborative on-line tools.
- Maintain formal and informal contacts with students, student government, and student organizations on IT needs and issues.

Assessments:

- The number of services available through the Internet.
- The amount of wireless access.
- The amount of common-access areas.
- The number of technology classrooms.
- The number of services available on portable devices.
- The students' satisfaction with the technology available to them.

***Objective 1.2: Enable technology-enhanced teaching.***

Strategies:

- Support the special needs of teaching and learning in very technology-focused areas such as engineering, the sciences, and business by providing and maintaining technology for those units in collaboration with their faculty and staff.
- Increase the number of distance/technology education classrooms to keep pace with demand.

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- Offer faculty the ability to Web cast and to have cheap and easy video interaction with students—individually or in groups.
- Collaborate with faculty and others in seeking external funding for technology in teaching, including redesigning processes and methods of instruction.
- Collaborate with faculty in the humanities and social sciences to extend technology into their pedagogy.
- Implement an appropriate replacement cycle for faculty computers campus-wide.

Assessments:

- The usage of classroom technology.
- The availability of Web casting.

***Objective 1.3: Use technology to foster lifelong learning and support distance education.***

Strategies:

- Maintain long-term connectivity with former students.
- Provide contemporary mechanisms and infrastructure for delivery at a distance to lifelong learners and others.

Assessments:

- The number of alumni with connectivity.
- The success technology in supporting distance education efforts.

**Goal 2. Integrated IT Environment: Deliver information and services in an integrated environment that fosters an open, collaborative, and unifying culture and provides ubiquitous access to needed information.**

**Critical Success Factors** (*measures the degree of success over the next 5 years*):

- Conduct at least 50% of business on the Internet.
- Ensure access to information-on-demand from all TTU business/administrative databases.
- Implement a single authentication method for the University.
- Establish an official e-mail location for all employees.
- Develop and implement a set of complete, integrated portal solutions for the entire University

**Objectives:**

**Objective 2.1:** *Use e-Business and the Internet to deliver services better, faster, and easier and to leverage the valuable time of employees and students.*

Strategies:

- Use the Internet as the primary mode of conducting the routine administrative business of being a student, a faculty member, or a staff member, and use the transition to the Internet as an impetus and occasion to reengineer processes and activities and to eliminate processes and activities that cannot be justified by their value added.
- Create a connected and University-wide ability for all members of the TTU community to communicate and obtain services electronically.
- Replace or enhance legacy, old-tech administrative application systems in finance, student information, human resources, library, and other areas to allow appropriate delivery of services.
- Implement e-Commerce and e-Government applications to allow better interaction with stakeholders and others outside the immediate campus community.

Assessments:

- Benchmarks against peers in education and private industry.
- Savings and efficiencies.

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**Objective 2.2: *Make needed information available to students, faculty, and staff available easily.***

Strategies:

- Remove outdated and artificial barriers to access information—both technical- and policy-based.
- Use the Internet as a primary delivery vehicle for needed information.
- Create secure, well-structured data warehouse applications and powerful and easy-to-use tools to access them on demand.
- Acquire or develop powerful, relevant, and easy-to-use software for decision support and modeling to facilitate informed and data-driven decision-making at TTU.
- Use portal solutions (and their successors) to deliver information to students, faculty, potential students, and staff.

Assessment:

- Benchmarks against peers and against industry's best practices.

**Objective 2.3: *Provide data and analysis for assessment, performance measurement, and accountability.***

Strategies:

- Create assessment databases and make them easy to use, and provide additional analysis for assessment or performance measurement on demand.
- Provide accountability data to all relevant consumers

Assessment:

- Success of assessment activities of other units and areas.

### **Goal 3. Technology Infrastructure: Supply a reliable, state-of-the art information technology infrastructure.**

#### **Critical Success Factors** (*measures the degree of success over the next 5 years*):

- Increase bandwidth available off campus by a factor of at least 3.
- Increase bandwidth available on campus by a factor of at least 2.
- Extend on-demand help desk/technical support to all members of the campus community.
- Provide on-line tutorials for key applications.
- Establish training programs for technical support personnel outside of our division.
- Create the Technology Assessment Department.
- Provide an average of 80 hours per person per year in training and development for IT Division employees.

#### **Objectives:**

##### **Objective 3.1: Operate state-of-the art telecommunications networks.**

###### Strategies:

- In collaboration with others at TTU, TTUHSC, and in the industry, create uniform, Texas Tech-wide standards, policies, and methods of operation for all data, voice, and video networks to create an integrated, fully networked, fully connected institution.
- Create and maintain a comprehensive and effective e-mail, network data storage, user authentication, and security operation, using events such as the implementation of new technologies to achieve needed consistency across the enterprise.
- In collaboration with researchers at TTU, with faculty working in distance education, and with other stakeholders, maintain adequate and expanding access to bandwidth going off campus to ensure appropriate performance.
- In collaboration with all appropriate parties, maintain adequate and expanding access to on-campus network services.
- Implement wireless and other new networking technology to keep TTU's networking contemporary.
- As changing technology dictates, plan the integration of voice and other networks.
- Create and enforce uniform standards and procedures for network security, and do the same for network-connected servers and devices.
- Increase the reliability and uptime percentages of networks.
- Integrate Junction and any other external TTU facilities with the campus network.

###### Assessments:

- Quantity of usage and demand.

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- Benchmarks against peers.
- Measurement of customers' satisfaction.

***Objective 3.2: Deliver basic services reliably and effectively.***

Strategies:

- Utilize mainframe resources efficiently, and leverage mainframe reliability. Create efficiencies through effective systems programming and management.
- Provide hosting, backup and recovery, and other services for non-IT Division servers.
- Provide expanded storage economically through implementation of Storage Area Networks.
- Provide services through scalable, platform-independent, industry-standard products.
- Deliver voice service efficiently and affordably while preparing for delivering these services in an integrated telecommunications setting.

Assessments:

- Performance statistics.
- Quantity of use of services.
- Level of customer satisfaction.
- Benchmarks against peers.

***Objective 3.3: Supply training, consulting, and customer support.***

Strategies:

- Expand Help Desk functions to cover all basic areas as close to 24x7 as needed.
- Provide desktop support to “have not” departments and areas and provide consulting and backstopping desktop support services to “have” departments.
- Expand the scope and availability of computer and/or network-based training in technology for students, faculty, and staff.
- Create expert level resources to support departments in answering higher-level technology questions.
- Create an independent technology assessment and consulting group within the IT Division to work with researchers and others to identify, evaluate, and help manage new and changing technologies in a timely way.
- Increase the frequency and depth of both formal and informal contacts between members of the IT Division and our community of customers, especially faculty and students.

Assessment:

- Usage of and satisfaction with the services.

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***Objective 3.4: Maintain and develop TTU's human IT infrastructure.***

Strategies:

- Make ongoing training a priority within the IT Division, and make budgeting adequate time and resources for it a requirement for IT managers.
- Provide a career path other than moving to management for IT professionals.
- Implement a flexible, market-based, and realistic pay plan for IT professionals.
- Leverage the teaching resources of the University by encouraging and supporting IT staff to take courses and seek degrees at TTU.

Assessment:

- Retention and productivity of employees.

***Objective 3.5: Support access and diversity in employment.***

Strategies:

- Recruit a diverse workforce.
- Retain a diverse workforce

Assessment:

- Diversity of the workforce.

**Goal 4. Support, Research, and Economic Development: Support research, service, economic development, and service in rural areas.**

**Critical Success Factors** (*measures the degree of success over the next 5 years*):

- Automate, as much as possible, the grant application and management process.
- Complete a high-speed data connection between Reese and the main campus.
- Participate in obtaining funding for rural development.

**Objectives:**

**Objective 4.1:** *Support high-performance computing.*

Strategies:

- Work with researchers to seek external funding for high-performance computing.
- Connect high-performance computing activity at Reese with high-performance computing users and facilities on the TTU campus.
- As needed, provide hosting and other support and infrastructure for Beowulf clusters and other high-performance computing facilities on the TTU campus.

Assessment:

- Usage of high-performance computing by researchers.

**Objective 4.2:** *Provide effective and innovative support for researchers, including those in areas beyond those traditionally associated with information technology.*

Strategies:

- In collaboration with the Teaching, Learning, and Technology Center, and others, provide consulting, training, and other services for researchers, including those in the humanities and social sciences, needing to incorporate technology in or in support of their research.
- Provide expanded opportunities for graduate students to find employment opportunities as graduate assistants in the IT Division in activities that are relevant to their course of study and research.
- Through more systematic contacts with the faculty, make researchers more aware of the resources available within the IT Division.

Assessment:

- The volume and scope of activity and the satisfaction of the customers.

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***Objective 4.3: Be a factor in economic development, and bring access to technology to rural Texas.***

Strategies:

- Provide collaboration and consulting to those on and off campus working to use technology for economic and rural development.
- In collaboration with researchers, seek external funding for rural and economic development.
- Encourage employees in the IT Division to participate in advisory and governing groups related to rural and economic development, and reward them for these service activities.
- As appropriate, host or support a technology infrastructure for economic and rural development.

Assessment:

- The volume and scope of activity and the satisfaction of the customers.

## **Goal 5. IT Management Strategy: Manage IT as a strategic resource.**

### **Critical Success Factors** (*measures the degree of success over the next 5 years*):

- Work with TTU colleagues to achieve \$1 million in savings and efficiencies in IT via collaboration and integration over 5 years.
- Increase the savings due to vendor relationships by \$500,000 over five years.
- Increase spending on IT as a percentage of total expense.
- Have operational technology strategic and tactical campus committees.

### **Objectives:**

#### **Objective 5.1: Provide strategic investment.**

##### Strategies:

- Through procurement review and coordination and collaboration, decrease or eliminate duplicate or inconsistent investment at TTU. Ensure that the major IT investments of all units of are in line with institutional goals and strategies.
- Decrease the number of vendor relationships, while making those remaining more leveraged and strategic. Use mainstream vendors as sources of information on directions within the IT industry.
- Increase spending for IT both in total amounts and as a percentage of overall spending.
- Program IT investment into the planning process for additional HEAF, TRBs (Tuition Revenue Bonds), and commercial paper. Seek external funding aggressively and systematically.
- Drive investment by strategic priorities, not by precedent or familiarity and level of comfort with a particular technology.

##### Assessment:

- Quantity of IT investments and their results.

#### **Objective 5.2: Provide strategic governance and direction.**

##### Strategies:

- Create formal collaborative councils and committees, including a CIO Council to address collaborative issues with the TTUHSC, a Strategic Direction Committee to address campus-wide IT issues, a Private Industry Advisory Group, and a Technology Advisory Committee to address technical and tactical IT issues at TTU.
- Coordinate the work and planning of the IT Division with the IT-related activities of the colleges and other divisions at TTU.
- Make strategic planning and assessment an on-going activity for the IT Division.

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- Use systematic technology assessment, and review to reach and remaining state-of-the-art in IT.

Assessment:

- Measurement of the results of integrations, coordination, and collaborations.