

INFORMATION TECHNOLOGY DIVISION STRATEGIC PLAN

MISSION STATEMENT

The Information Technology Division provides reliable, contemporary, and integrated technology to support and facilitate 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;
- accountability;
- continuous improvement; and
- collaboration and teamwork.

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

Goal 1. Access and Technology: Create a technology-enriched environment that supports teaching, research, and learning, and prepares students for the workplace.

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

- Create and enable online services through modern and pervasive means, including Internet, Intranet, Cloud, and Mobile.

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- Deliver Internet-based student recruiting and retention tools to provide a competitive advantage for TTU.
- Establish and maintain public access computing areas sufficient to meet the growing enrollment and research demands.
- Maintain a robust secure wireless network for high traffic, public areas.
- Use technology to enhance and leverage existing and new classroom space to meet enrollment strategic goals.
- Provide technology-based support and integration for research, distance and lifelong learning, remote sites and campuses, community college partners, and regional development efforts.

Objectives:

Objective 1.1: Provide access to information resources for students.

Strategies:

- Maintain fully supported, 24x7 student computer access areas supplied with contemporary equipment and software within a 15-minute walk from any on-campus residence location.
- Create and maintain computer access areas configured specifically for collaborative learning and interaction. 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 to all appropriate classrooms and other campus locations.
- Maintain and negotiate site-licenses software agreements to provide affordable software solutions to support education and prepare students for post-graduation pursuits.
- Establish relationships with vendors that leverage the buying power of Texas Tech to create opportunities for students to acquire computing devices at highly competitive prices.
- Provide students access to information resources, 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 number of wireless access points.
- The number of computing facilities.

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- The number of technology classrooms.
- The students' satisfaction with the technology available to them.

Objective 1.2: Enable technology-enhanced teaching.

Strategies:

- Collaborate with faculty and staff to support and enhance teaching and learning.
- Collaborate with the campus community regarding distance/technology education classrooms to provide effective solutions that support enrollment growth.
- Provide technology solutions that facilitate communication and interaction.
- Collaborate with faculty and others in evaluating and implementing 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.
- Advise areas and departments regarding technology solutions and technology capital replacement.

Assessments:

- Number of technology solutions that enhance teaching.
- Number of technology assessments and evaluations.
- Interactive video classrooms and general purpose technology classrooms deployed.

Objective 1.3: Enable the research activities of the University.

Strategies:

- Provide the facilities, expertise, and support for research that utilizes high performance computing.
- Work with researchers to seek and secure external funding for research that utilizes high-performance computing.
- Provide access to the high-speed, regional and national research networks such as LEARN and Internet2 for researchers.
- Enable TTU researchers to seamlessly access state and national high performance computing resources through collaboration, federation, and other partnerships.
- Provide storage and/or data management expertise for the securing and protecting TTU research data.

Assessments:

- Total on-premise HPC compute capabilities available.
- Total cloud-based HPC compute capabilities available.
- Total research bandwidth available.

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- Total external funding secured that requires HPC.
- Amount of TTU research data secured/protected.
- Number of training session and events for advanced computing.

Goal 2. Integrated IT Environment: Deliver information and services in an integrated and secure 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*):

- Leverage technology to streamline business processes.
- Ensure access to information on-demand from all relevant TTU business/administrative databases.
- Maintain a single authentication method (network account system) for the University.
- Maintain electronic mail access and storage for all faculty, staff, and students.
- Maintain an integrated technology environment that supports institutional strategic initiatives.

Objectives:

Objective 2.1: *Use electronic transactions and the Internet to deliver services in support of operations, research, and education.*

Strategies:

- Leverage business intelligence and educational tools.
- Work collaboratively with campus areas and units to leverage technology as a means of conducting university business.

Assessments:

- Benchmarks against peers in education and private industry.

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

Strategies:

- Create a connected and University-wide ability for all members of the TTU community to communicate and obtain mission critical services electronically.
- Remove outdated and artificial barriers to access information—both technical and policy-based.
- Leverage information resources to facilitate access to information and data.
- Create secure, well-structured applications in support of academic and research initiatives.
- 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.
- Deliver information to students, faculty, potential students, and staff from a common location.

Assessment:

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- Benchmarks against peers and against industry's best practices.
- Number of completed applications

Goal 3. Technology Infrastructure: Maintain a secure, reliable, and sophisticated information technology infrastructure.

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

- Maintain adequate commodity and research internet bandwidth to support academic, administrative, and research demands.
- Maintain adequate intranet bandwidth to support research, education, and business needs.
- Maintain on-demand help desk/technical support to all members of the campus community.
- Provide on-line tutorials and resources for key applications.
- Expand training programs and educational opportunities for technical support personnel outside of IT Division.
- Provide an ample training and development for IT Division employees to stay abreast of technology changes and associated skills.
- Deploy Unified Communications as a strategy for replacing legacy voice telephony.

Objectives:

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

Strategies:

- In collaboration with others at TTU, TTUHSC, and in the industry, maintain our 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.
- 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 support of institutional strategic goals.
- In collaboration with all appropriate parties, maintain a robust and secure network and communications infrastructure.
- Evaluate and support networking technology to keep TTU's networking sufficient to meet growing institutional needs.
- Work collaboratively with the Texas Tech System to integrate voice and data networks.
- Maintain and enforce uniform standards and procedures for network security, and do the same for network-connected servers and devices.

Assessments:

- Quantity of network usage and demand.
- Benchmarks against peers.

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- Measurement of customers' satisfaction.

Objective 3.2: Deliver core IT services reliably and effectively.

Strategies:

- Create and maintain a comprehensive and effective e-mail, network data storage, user authentication, and security operation, to provide a robust infrastructure sufficient to meet institutional research, education, and business needs.
- Create efficiencies through effective systems programming and management.
- Maintain and provide expanded storage economically through implementation of Storage Area Networks.
- Provide services through scalable, platform-independent, industry-standard products.

Assessments:

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

Objective 3.3: Administer and execute a comprehensive and effective institutional information security program.

Strategies:

- Make use of state and federal resources and industry expertise and best practices to continually develop and enhance the information security program.
- Utilize a combination of policies, controls, and education to enhance the overall security posture of the University's IT environment.
- Integrate risk management and compliance into the program.
- Maintain adequate levels of professional staff, hardware, and software tools for effective execution.
- Conduct periodic independent external reviews and tests of critical program elements.

Assessments:

- Security related attacks blocked.
- Number of outstanding vulnerabilities.
- Number of security incidents.
- Number of educational events and programs.
- Number of independent external reviews.

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Goal 4. IT Support and Leadership: Outreach to campus and external communities.

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

- Provide technology-based support and integration for research, distance and lifelong learning, remote sites and campuses, community college partners, and regional development efforts.

Objectives:

Objective 4.1: *Provide IT training, consulting, and customer support.*

Strategies:

- Maintain zero, first, second, and third level customer support.
- Provide desktop support to departments and areas without their own technical support staff and provide consulting and backstopping desktop support services to departments and areas with their own technical support staff.
- Offer computer and/or network-based training in technology for students, faculty, and staff, expanding new technologies are introduced into the Texas Tech environment.
- Provide 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:

- Service usage and satisfaction metrics
- Number of assessments conducted

Objective 4.2: *Maintain and develop TTU IT staff skills.*

Strategies:

- Make training and professional development a priority within the IT Division, and recognize employees who go beyond the minimum training requirement.
- Provide a technical career path for IT professionals.
- Maintain 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.
- Provide employment opportunities for graduate students in the IT Division in activities that are relevant to their course of study and research.

Assessment:

- Retention and productivity of employees.

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Objective 4.3: Support access and diversity in IT employment.

Strategies:

- Target areas for recruitment where applicants would likely diversify the IT workforce and maintain the highest standards of excellence.
- Network with area leaders and within area organization that promote and encourage diversity
- Engage local and regional students at a high school age to increase interest in information technology.

Assessment:

- Diversity of the workforce.
- Participation in diversity initiatives and events.

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

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

- Continuously explore ways to increase savings and efficiencies via collaboration and integration at TTU.
- Continuously explore ways to increase savings and efficiencies via strategic partnerships with vendors.
- Achieve efficiencies through electronic transactions and processes.
- Minimize duplication of IT resources at TTU by leveraging centrally provided information resources.
- Use business intelligence to streamline institutional processes and engender operational and educational efficiencies.

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.
- Maintain an optimum 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.
- 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.
- Savings and efficiencies.

Objective 5.2: Provide strategic governance and direction.

Strategies:

- Use formal collaborative councils and committees as appropriate.
- Make strategic planning and assessment an on-going activity for the IT Division.
- Use systematic technology assessment and review to achieve and maintain state-of-the-art IT practices across the University.
- Use project management methodologies for IT projects.

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Assessment:

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