

Youngstown State University  
**Technology Master Plan**

***Overview***

The Technology Master Plan (TMP) is based on the foundation within the Centennial Strategic Plan to design the future of Youngstown State University in the 21<sup>st</sup> century by providing “an integrated approach in using technology to meet the academic, research, student-services, and administrative goals of the University.” The Plan establishes a vision for Information Technology (IT) Services that will keep pace with an evolving, interactive, student-centered and collaborative electronic learning environment, providing seamless access to data, information, and knowledge in an effort to meet the needs of the University community.

The Plan is guided by the Information Technology Services Mission Statement to provide the infrastructure and support necessary to enable the University community to use information technology effectively to facilitate the institutional mission of providing “open access to high-quality education through a broad range of affordable certificate, associate, baccalaureate, and graduate programs.” Information Technology Services will be dedicated to providing responsible leadership, delivering quality services, maintaining a high level of satisfaction in the delivery of these services, strengthening communication, and developing productive partnerships to further enhance the technological environment.

A comprehensive *Information Technology Doctrine* was developed within the Plan to establish overriding principles that provide the foundation for an ongoing University-wide information technology planning process.

***Information Technology Doctrine***

- A. Develop an organizational framework that is responsive to the growing technological needs of the University;**
- B. Promote compatibility among information technology systems and improve integration between systems and between applications;**
- C. Provide technology enhanced classrooms and improved academic support systems;**
- D. Enhance distance learning activities and instructional support;**
- E. Provide the financial structure to maintain and support technology initiatives;**
- F. Increase access to technology and facilitate compliance with local, state, and federal regulations;**
- G. Expand training opportunities for faculty, staff, and students;**
- H. Provide support for data, voice, video, and future technologies;**
- I. Maintain a current, reliable, and secure computing and networking environment;**
- J. Improve services to support the administrative functions and business operations of the University;**
- K. Develop and implement policies and procedures to address legal and operational issues concerning the University website.**

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This doctrine approach provides the guidelines necessary to ensure flexibility in the planning process that must be taken into consideration in an ever evolving and shifting technological base. The plan was developed distinguishing between “Enterprise” and “local” administration of specific IT functions and resources. An “Enterprise” function/resource has University-wide ramifications for the entire information technology endeavor, as opposed to a localized need.

The Doctrine further defines the overarching goals and strategies found within Critical Issue 7 of the Centennial Strategic Plan. These goals include:

1. *Integrate, coordinate, and provide technology and information systems;*
2. *Maintain a current and reliable networked technology infrastructure;*
3. *Provide access to technology and information that is up-to-date and user-oriented;*
4. *Implement effective use of technology in teaching and learning.*

The Technology Master Plan supports the goals within the Centennial Strategic Plan and identifies a series of recommendations to meet these goals.

*Integrate, coordinate, and provide technology and information systems.*

In an effort to support the goal within the Strategic Plan to integrate, coordinate, and provide technology and information systems, the Technology Master Plan Doctrine begins with identifying the need to **Develop an organizational framework that is responsive to the growing technological needs of the University**. This organizational framework includes establishing the “Information Technology Services” (ITS) Division and advisory committee structure, aligning Telephone Services and Creative Media Services within the Division, creating the position of Vice President of Information Technology (VPIT), and establishing written policies relating to technology.

Consistent with the need for integration, the recommendation within the plan to **Promote compatibility among information technology systems and improve integration between systems and between applications** recommends creating hardware/software standards, technology purchasing processes, and a technology standards subcommittee; promoting infrastructure/architecture software application principles; and improving integration between administrative and academic application systems.

**Providing the financial structure to maintain and support technology initiatives** constitutes one of the over-arching principles found with the Information Technology Doctrine, and gives consideration to improving methodologies to track technology-related resources/expenditures and expand cost recovery for Technology support. The primary focus within the financial section revolves around recommendations to institute an Information Technology Initiative Advantage Fund and Replacement Fund, as YSU further develops existing and additional IT funding sources.

Two additional sections within the Technology Master Plan overlap this first goal to integrate, coordinate, and provide IT systems. The need to **Improve services to support the administrative functions and business operations of the University** identifies a series of recommendations including acquiring collaborative and reporting tools, inventory management, document storage, digital media, and indexed retrieval systems, as well as evaluating and

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piloting a “smart card” program. A replacement of administrative computing systems with an integrated Enterprise Resource Planning (ERP) software solution is also recommended within the plan, implementing a modular approach (Finance, Human Resources, Student Information, Alumni/Development). Coordination of the University website is recognized, in addition to the need to **Develop and implement policies and procedures to address legal and operational issues concerning the University website**. Recommendations to develop design guidelines/standards, associated policies and procedures, as well as the need to invest in an enterprise-level portal and content management software system have been identified in this section.

*Maintain a current and reliable networked technology infrastructure.*

Expanding on the goal within the Strategic Plan to maintain the technology infrastructure, the plan identifies the need to include wireless capabilities as an integral component of the network infrastructure, enhance digital telephone services, and participate in Internet II as an effort to **Provide support for data, voice, video, and future technologies**. A comprehensive electronic security plan, an institutional network identification login, and a focus on backup and disaster recovery plans were considered to be fundamental recommendations to **Maintain a current, reliable, and secure computing and networking environment**.

*Provide access to technology and information that is up-to-date and user-oriented.*

Recommendations associated with **Increasing access to technology and facilitating compliance with local, state, and federal regulations** focus on increasing availability of, and support for, administrative and academic information technology systems and equipping targeted classrooms and labs with ADA compliant workstations. The need to validate official YSU pages for compliance, extend the networked environment, and create an information Internet-based information sharing environment are identified as a series of steps to provide access to technology and information that is both up-to-date and user-oriented.

*Implement effective use of technology in teaching and learning.*

To support effective use of technology in teaching and learning, YSU must recognize the need to **Provide technology enhanced classrooms and improved academic support systems**, incorporating wireless access for instructional use and increasing the number of multimedia classrooms and multimedia equipment. Better coordination of computer lab accessibility and operation is recommended, in addition to establishing state-of-the-art experimental laboratories and “low-cost” desktop/laptop programs for students, faculty, and staff. In an effort to keep pace with the electronic learning environment, YSU must **Enhance distance learning activities and instructional support**, increasing the number of interactive distance learning (IDL) classrooms within each college and strengthening technical support to effectively deliver courses at a distance. A crucial principle in implementing effective use of technology is to **Expand training opportunities for faculty, staff, and students** with a series of recommendations identified within the plan to identify training needs and initiate new training opportunities.

These elements represent the underlying strategies within the Technology Master Plan, the established directions for the future, and comprise the comprehensive doctrine that will provide for an ongoing University-wide information technology planning process.