UNIVERSITY OF ARKANSAS
PULASKI TECHNICAL COLLEGE

Technology Master Plan
2018-2022

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2 Letter from the Chief Information Officer

Greetings UA-Pulaski Tech Students, Faculty and Staff:

The UA-PTC Information Technology Services (IT Services) Department provides robust online systems and services to support you on your educational journey. As a strategic partner in the planning and allocation of technology resources for our campus community, we understand the importance of efficient administrative services and enhanced learning environments. We will be a leader through innovation to ensure that our institution is meeting the needs of today's students.

We continuously review the top technology issues facing institutions of higher education to determine the most critical issues to address for the valued stakeholders at UA-PTC. These issues affect varying scopes of this plan and an annual assessment process will assure the relevance of action plans are aligned with the needs of the College.

I hope that your time at UA-PTC is successful and that technology resources create an environment for excellence.

Please send me your questions, concerns, and ideas at cio@uaptc.edu.

Best wishes,

David Glover
Chief Information Officer
UA-Pulaski Technical College

3 Executive Summary

UA-Pulaski Technical College adopted the 2017 Strategic Plan focusing on student success and institutional effectiveness. The strategic plan has provided the framework for all other plans the College will implement to fully utilize resources to achieve its goals. These plans include the Academic Master Plan, Facilities Master Plan, Human Capital Management Master Plan, and the Technology Master Plan. This document outlines the strategy toward the efficient and effective use of information technology resources related to the successful outcome of the College's planning efforts.

The Information and Academic Technology Committee is the collegial body charged to ensure the effective use of the College's systems and technology. Working collectively as a group and subgroups, the Information and Academic Technology Committee provides input for the effective use and delivery of technology resources consistent and aligned with the College's 2017 Strategic Plan. The Technology Master Plan's goals and objectives answered the strategies needed to fully support and embrace student success and institutional effectiveness consistent with the 2017 Strategic Plan's goals.

The concept of universal design is of great importance because of the College's diverse culture. This principle is embedded as a fundamental philosophy in implementing systems and technology. Embracing the concept of universal design empowers the College to further instill and promote inclusiveness and diversity through its technology resources.

The Technology Master Plan has four distinct goals. The goals address the functional use of information systems and technology across the College. Goal 1 focuses on instructional or academic technology, which includes systems or technologies that directly affects teaching and learning. Goal 2 focuses on institutional or administrative technology, which includes systems or technologies that affects service delivery, decision- making, information dissemination, and knowledge-sharing. Goal 3 focuses on the underlying infrastructure that enables other systems and technologies to function. Finally, Goal 4 focuses on information security, which is an added importance to protect sensitive and personally identifiable information. All goals include training as an embedded activity to ensure the preparedness of students and/or employees in using the technology resources. There are a total of 18 objectives spread across the four goals.

4 Information Systems and Technology at the College

Classroom and Laboratory Technology. The standard classroom setup includes a desktop computer, a wall controller, a projector, and a ceiling-mounted speaker system. However, the maintenance and replacement of equipment on classrooms may be costly. There may be options to implement classroom technology in a more cost-effective way while achieving the same goals, ease of use, and availability.

The laboratory setup includes a set of computers. The number of computers depends on the physical room size and the class enrollment. The College deploys both Microsoft Windows and Mac OS labs. The type of machine deployed in a lab depends on the courses offered and their specific platform and/or software requirements. Sharing of labs maximizes the use of these significant investments. A review of usage may help the College identify new opportunities to meet the growing demands for technology supported instruction.

The College supports both Windows 7 and Windows 10. Future hardware replacement will allow standardization on Windows 10, making management and support more efficient.

We see in Virtual Desktop Infrastructure (VDI) the opportunity, through virtualization, to improve service delivery and management while reducing downtime. Experiences at other institutions of higher education suggest, however, that VDI is unlikely to decrease total cost of ownership. There is also the potential to expand the availability of technology resources to students and employees through the use of VDI with personally owned devices.

Wired and Wireless Technology. All buildings and campuses are fully equipped with wired infrastructure for both telephony and data. The wired network infrastructure supports our information data network used for teaching and learning and in the day-to-day operations of the College. As technology changes, this may be an opportunity to upgrade old cabling to comply with the standards adopted by the Institute of Electrical and Electronics Engineers (IEEE) and governmental agencies. There is also an opportunity to improve wireless technology to meet the latest IEEE 802.11 standards. The College is currently assessing and updating its wireless networks to Aruba access points to provide consistency for campus users.

Enterprise Resource Planning (ERP) System. Jenzabar's® EX system is the College's ERP system. The system includes the student information system, the financial and accounting system, and the human resources and payroll system. A review of the College's adoption and practices may be used for business process re-engineering. The purpose is to ensure efficiency and effectiveness affecting the delivery of services to students and employees. The Jenzabar web interface used by both students and employees is Jenzabar Internet Campus Solution (JICS). The current platform uses Microsoft SQL server. This enables the system to be more robust and easier to support.

The College has also adopted third-party systems to supplement the functionality of Jenzabar EX. Although there are third-party systems in place, the authoritative data repository resides with EX. EX drives the creation of network user accounts and the ability of students and employees to access different systems. A review integration of third-party systems with EX is important to ensure data accuracy and integrity.

Learning Management System. The College, in conjunction with the University of Arkansas System, has adopted the Blackboard Learn platform as its official learning management system. Blackboard's managed services provides an opportunity to fully synchronize provisioning of courses and course information from the College's ERP system. Training for faculty and students is an essential element of a successful learning management system. IT Services helps the faculty to manage their course content.

Document Retention and Management. The College has adopted document management using the OpenText™ ApplicationXtender system, which interfaces with Jenzabar EX. There is an opportunity to expand the use of document management after developing a document retention standard across the College which complies with applicable laws and statutes governing electronic document retention.

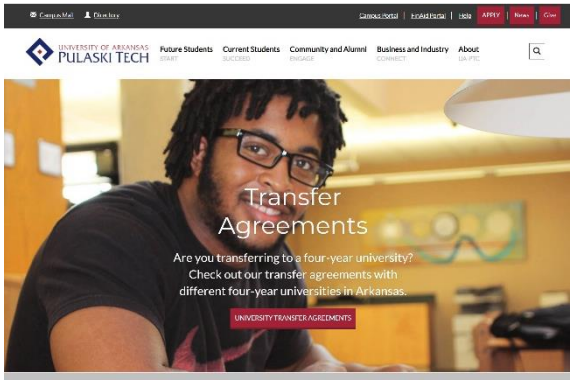
Reporting and Data Gathering. With Jenzabar EX as the primary source of information, customization of reports is provided utilizing Sybase Infomaker. Additional analytics and powerful business intelligence is available through Izenda and IBM Cognos. These solutions enable the College to use disparate data for a more comprehensive data-driven report generation and decision-making process.

Electronic Mail System. The College uses Microsoft Office 365 for employee and student electronic mail. This includes calendar, contacts, and notes. Official communication to students is through their institutional email accounts. It is good practice to provide an official email service to facilitate institution-wide communication standards. Students are provided the option to forward email to their personal accounts. Providing the students an email account does not only allow an effective delivery of email notifications to students, but also provides students an opportunity to benefit from no-cost licensing of the Microsoft Office Suite.

Phone System. The College uses voice over IP (VOIP) phones at all locations. Service phones (phones located on elevators, facsimile lines, and emergency alarms) must remain analog to ensure continuity of service in the event of power and/or network disruption.

Information Security. Protecting information is a primary consideration when deploying systems/technology and providing access to users. Changes in technology and user behavior contribute to the challenge of balancing security and access. Awareness is critical for prevention. Therefore, information security awareness must be embraced throughout the College so that users are aware and cautious in employing online systems and technologies. At the same time, the College needs to develop procedures and protocols to address network breaches and/or, exposure of personally identifiable information.

Web Presence. The College's website was recently redesigned and launched in March of 2017. With the recent developments in web technologies, responsive design must be the primary consideration. Responsive design is the ability of the website to change its appearance depending on the type of device used (computer, tablet, and smart phones). There is also an opportunity to decentralize the process of updating webpages to provide departments and divisions the ability to update their content timely and, at the same, the College applying consistency on design and format using its modern content management system.



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5 Technology Priorities, Goals, and Strategies

Alignment of Technology Goals with the College's Strategic Plan

The alignment of the Technology Master Plan ensures the responsibility of information systems and technology to the College's strategic goals and objectives. The expectation is for the Technology Master Plan to serve as a guide on how information systems and technology at UA-PTC responds to the strategic goals and objectives of the College and how IT Services will collaborate with other departments and divisions to achieve their goals, to solve problems, and to share information and knowledge.

Instructional Technology

Provide all learning spaces with the appropriate technology to promote the exchange of ideas for learning and for achieving student success.

- Establish physical classroom/lab spaces responsive to the needs of faculty and students.
- Develop virtual learning spaces responsive to the needs of faculty and students.
- Establish systems and technology to support student learning consistent with the student success and support programs, basic skills, and student equity.

Institutional Technology

Provide an environment with the most appropriate tools for effective and efficient communications, service delivery, problem-solving, decision-making, and knowledge-sharing in a timely manner.

- Establish process re-engineering for effective service-delivery enhancing the College's efficiency and effectiveness and leverage on the use of the College's ERP system for data collection and data retrieval.
- Establish systems and technology to streamline student-related processes aligned with admission, retention, progression, and completion.
- Implement the use of business intelligence tools to support timely and accurate decision making and strategic planning.
- Maintain a portal for the College integrating self-services for students and employees.
- Implement a comprehensive training program addressing current and evolving technology needs for employees.

Technology Infrastructure

Provide a technology infrastructure integrating innovative and state-of-the-art systems and technology that is flexible, scalable, available, adaptable, and accessible.

- Establish robust, flexible, available, and scalable systems and services College-wide.
- Establish a process for scheduled, regular replacement of computers, network equipment, and other technology resources.
- Implement virtual technology on desktops and infrastructure for enhancing efficiency and promoting sustainability.
- Maintain a robust, flexible, and scalable wired technology infrastructure at all College locations.
- Establish a robust, flexible, and scalable wireless technology infrastructure in all learning and operational spaces across the College.
- Adopt cloud technology on applicable systems as an extension of the College's technology infrastructure to ensure continuity of critical services.

Information Security

Provide an environment balancing the availability of information with securing the sensitive and confidential information of all stakeholders.

- Implement best practices in higher education information security in all major College-wide information systems and technologies.
- Adopt board policies and administrative procedures reflecting best practices in information security.
- Implement a College-wide information security awareness program for all students and employees.
- Implement a single credential to access all major information systems and other major technology services.

6 Appendices

Appendix A- Information and Academic Technology Committee

Permanent by Title, Director of Academic Technology, Jason Green

Permanent by Title, Director of Network Operations, Moses Thomas

Permanent by Title, Director of Systems Programming, Wayne Floyd

School of Fine Arts, Humanities, and Social Sciences Faculty Representative, Leon Shik

School of Fine Arts, Humanities, and Social Sciences Faculty Representative, Don Spitler

School of Sciences, Mathematics, and Allied Health Faculty Representative, Rachel Caruthers

School of Sciences, Mathematics, and Allied Health Faculty Representative, Shannon Vaughn

School of Technical and Professional Studies Faculty Representative, Robert Callicott

School of Technical and Professional Studies Faculty Representative, Rebecca Sterling

Faculty At-large, Robert Coates, School of Technical and Professional Studies

Staff At-large, Bonnie Faupel

Staff At-large, Molly Mitchell

Student At-large, Nicklaus Morgan

Elected Chair (voting): Shannon Vaughn

Elected Recorder (voting): Molly Mitchell

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