Information Technology

Strategic Plan

July 2020

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Executive Summary

The Arkansas State University-Beebe (ASUB) Information Technology Strategic Plan outlines initiatives and goals that provide the foundation for current and future use of technology at the College. They share the same core values of Student Success, Integrity, Diversity, Quality and Community as mentioned in the 2018-2023 Strategic Plan.

The College recognizes that information technology is a vital component in providing quality educational services to our students, which allows for the expanded use and growth of technology-based systems and services. As the College's information technology organization, the ASUB Information Technology Services (ITS) department is a focused, committed partner for progress in meeting the demand and delivering technology services for all campuses and locations.

In combination with this growth and dependence upon technology, the higher education industry continues to change, and our institution faces the challenge of containing costs, operating more efficiently, and effectively utilizing available resources provided by the Arkansas State University System. Potential synergies may exist by sharing technical resources within the system, thus saving time and money as we better serve all students.

Since technology has become prevalent in all aspects of daily life and work, it is critical that a strategic approach is taken to strengthen the College's use of technology. Increasing the availability of technology is not the only goal; the College strives to empower individuals to seek better ways to utilize technology in their work and take ownership of improving their processes.

At each of ASUB's four campuses and locations as well as in our online environment, information technology is considered a strategic asset that assists faculty, employees, and students in achieving their academic goals; facilitates the administration's capabilities of conducting college business; and sets the boundaries/framework as to what process improvements can be realized by functional and technical staff. Overall, the use of technology is a critical component of the College's ability to learn, teach and administer within the higher education landscape.

The College has developed this strategic plan to make it easier to see how the planned approach to using information, offering online services, and applying technology will advance the institution by transforming lives through quality learning experiences.

Technology Vision

To make the College's technology *a key resource* for its users.

Technology Mission

Arkansas State University-Beebe provides stable, integrated, and innovative technology solutions to support learning, teaching and service within our growing and changing environment. In addition, the College empowers individuals to seek better ways to utilize technology in their work and take ownership of improving their processes.

Principles

- **Dedication**
- **Transparency**
- **Data Driven**
- **Consistency**
- **Teamwork**
- **Responsiveness**
- **Communication**

Institutional Context

The Information Technology strategic plan reinforces the Strategic Goals & Objectives documented in Arkansas State University - Beebe's 2018-2023 Strategic Plan. Each of the following strategies will support institutional goals and priorities by addressing key areas where information technology can be utilized to assist.

Technology Initiatives

The ASU-Beebe technology initiatives are key areas of concentration that make the College a better institution and to provide a standard level of technology for all campuses. They are as follows:

I. Instructional Technologies
II. Administrative Technologies

III. Infrastructure

IV. Enterprise Applications

V. Support and Training

VI. Security

VII. Technology Planning and Management

Strategies

I. Instructional Technologies

Instructional technologies refer to the growing and constantly changing instructional delivery and management platforms. This section includes services such as the College's learning management systems, web-conferencing, virtual environments, smart/multimedia classrooms, and any other technologies used to facilitate the learning process for ASUB students. Consideration should be given to ensure classrooms have the technology and support the future of learning in the following areas: Digital Learning and Futuristic Teaching. Additionally, the strategies should include gathering additional perspectives on how Information Technology should support various constituents throughout the College in relation to the institution's strategic goals and support. Overall, the goal of all items within this section is to increase and improve the use of technology, collaboration, and best practices in the classroom.

A. Learning Management Systems

Goal: To administer the College's learning management systems allowing for a user-friendly learning experience

With demand for online courses growing, it is critical that students, faculty, and staff have a learning management system that is easily accessible and provides automation for a seamless experience.

B. Lecture Capture and Media Services

Goal: To improve the College's course/lecture capture and delivery applications and systems

The classroom setting generates value with each scheduled class. The ability to capture the lectures and discussions for those remotely viewing live classes is imperative for on-line learners to be successful. The evaluation of these technologies and their availability to our

students is a focus of the Information Technology Services Advisory Committee (ITSAC).

C. Teaching and Learning Facilities, Rooms, and Spaces

Goal: To increase the College's availability of Smart Learning Facilities

Learning spaces across all campuses are monitored and considered for the latest smart technologies. As projectors, multimedia computers, document cameras, and other presentation hardware and software reach end of life, the possibility to update these classrooms with advanced technology is continually evaluated by applying the most current Educational Technical Standards.

D. Instructional Evaluation and Assessment

Goal: To better leverage and integrate systems and tools that evaluate academic objectives

In order to properly gather and analyze internal data, the College relies heavily on assessment and survey applications. Both systems provide invaluable feedback that can assist in information technology related decision-making and give the institution the capability to compare against higher education best practice benchmarks.

E. Video Conferencing Technology

Goal: To connect constituents across campuses and online in a practical, cost effective manner

For ASUB to exceed current capacity, video conferencing technology must be utilized to increase capacity while being cost effective.

II. Administrative Technologies

The administrative technologies section brings into focus the different technologies that improve and ease the process of getting an education at ASUB, including how technology will be used to assist administration offices, online services, resource scheduling, and overall technology use.

It is critical for this portion of the plan to remove any barriers preventing support areas, students, and technologies from effectively executing their respective tasks.

- Assess and prioritize opportunities related to better supporting reporting, clarifying data flows, standardizing data (e.g. entity and names), streamlining records management
- Develop a strategy for administrative data management, scoping, and prioritizing different opportunities
- Removing barriers to collaboration and facilitating knowledge and best practice sharing

A. College Administration and Management

Goal: To become more efficient in offering and utilizing administrative services or applications for the College that are critical for business operations and Institutional support

Many institutional services are offered online and continue to undergo improvement and upgrades. An on-going effort to ensure these applications and systems are monitored and evaluated as the campus continues to change and grow is critical.

B. Online Systems and Services to Support Enrollment Growth and Retention

Goal: To ensure that technology enhances the quality of the learning experience and transforms lives while growing and stabilizing enrollment

Keeping students on track to graduate and/or transfer to another institution is imperative for ASUB. In order to increase the probability that existing students will be retained and new enrollment numbers will increase, focus is placed on the online systems and services that support each student's learning experience.

C. Business Intelligence for Data Driven Ideas and Decisions

Goal: To enhance the College's Business Intelligence capabilities

The need for easily accessible data is critical when making fast paced business decisions. The evaluation of business intelligence tools is a priority, while finding a solution that is the best fit for ASUB's needs drives a potential implementation.

D. Business Intelligence Solutions

Goal: To research potential business intelligence solutions and prototype the reports and dashboards around key performance indicators to assist with data driven decision-making

As institutions are expected to be increasingly efficient, being able to make fast, data driven decisions allows the College to realize new efficiencies and improve the services it provides. By implementing and properly training staff to use a business intelligence tool, the College gains a different viewpoint of data allowing better tracking of recruitment, retention, success rates, and other related metrics.

E. Alumni Management System

Goal: To utilize technology to more effectively track the College's graduates and transfer students

The ability to track graduates and transfer students can provide useful connections for the College, while providing a potential donor base for fundraising endeavors. Efforts to streamline the flow of information as a student goes from applicant to graduate or transfer has value and is more efficient and effective if properly utilizing information technology. Through the use of technology, enrollment management planning and execution are positively impacted.

III. Infrastructure

The infrastructure section of the information technology strategic plan brings focus to the College's networks, disaster recovery planning, business continuity, storage, client hardware, server hardware, mobile infrastructure, and system availability.

A. Stable and Secure University Infrastructure

Goal: To enhance the College's telecommunications (voice, video, data) capabilities

The design and implementation of a high-performance, redundant architected core, and edge network is a strategic focus and a recurring point of evaluation in order to effectively provide services to the rapidly growing needs of students, faculty, and staff. Efforts are applied towards deploying a robust, stable, and secure environment for all campus users.

B. Disaster Recovery and Business Continuity

Goal: To maintain emergency preparedness by creating and updating disaster recovery and business continuity plans

Enhancing the College's ability to manage and maintain every facet of disaster planning provides the necessary guidance and assistance for each business unit on all campuses. The education and awareness training that accompanies this type of initiative ensures operations can continue and that each area has a documented plan for getting their services back online.

C. Advanced Educational and Research Networks

Goal: To fully leverage available bandwidth provided by available research and education networks

The College's acquisition of additional bandwidth for all campuses via state provided research and educational networks better enables communication between other schools within the state. This reality improves our connection to other Arkansas State University System schools, which allows us to explore off-site, nightly back-ups of core systems. This research and education network, at an additional cost, allows the institution to consume commodity internet at discounted rates. Having this additional bandwidth allows our faculty and students to continue to use, and possibly better leverage, web-based learning tools while on campus.

D. College Storage Solution

Goal: To create a campus wide central storage service offsite with policies and procedures for future storage needs, data protection, and backup plans.

By creating a centralized data center storage system, Information Technology Services provides a cost effective, centrally managed and shared storage infrastructure accessible by College departments and divisions at all campuses.

E. Client and Server Hardware

Goal: To improve hardware management and utilization for the College's client and server hardware

Better management of the hardware inventory system could improve the College's information technology asset management. Reducing costs associated with desktop PCs,

laptops, and servers is the focus of this initiative. Researching and potentially implementing server virtualization and alternative desktop infrastructure also generates long-term information technology cost savings.

F. Mobile Infrastructure

Goal: To mobilize the College's technology infrastructure to increase student access

Mobile devices are a reality for our users and are seen on all campuses. The need to mobilize specific online services for students is growing, and by providing mobile friendly applications, the College adds value to the education experience offered.

G. Performance and System Reliability

Goal: To always push for better performance within our networks while maintaining high availability

To ensure that industry standards and best practices are followed, periodic evaluations of the network infrastructure enable the institution to experience better performance and less downtime.

IV. Enterprise Applications

This section of the strategic plan focuses on the different software solutions or applications that provide or may provide services to the entire enterprise. Goals and strategies for the College's identity management solution, the student information system, the emergency notification system, and the mobile app are contained within the enterprise applications section.

A. Identity Management Solution

Goal: To research potential identity management solutions and create an implementation plan for the College

As more and more applications and devices require access to the College's technology resources, having a single, central identity management solution assists in dealing with multiple login credentials.

B. Student Information System

Goal: To provide the College with an efficient and effective student information system that can serve the business needs of the College

The College's student information system contains mission critical demographic and learner data on each student as well as important data related to institutional administration. All of Arkansas State University-Beebe's campuses rely on the student information system, and focusing on the systems development and reliability is imperative.

C. Emergency Notification Systems

Goal: To facilitate, enhance, and periodically re-evaluate the College emergency notification system and its capabilities in effectively communicating to faculty, students, and staff in the event of an emergency

Being prepared in an emergency situation is critical for the College, and ensuring that the official notification system can adequately and quickly communicate to all opted-in users is a high priority focus item. Periodic system tests and thorough product evaluations gives the institution a better understanding if the available system meets the needs of all campuses.

D. Mobile App

Goal: To utilize the College Mobile App as an effective means of communication across the stakeholder groups.

As stakeholder populations virtually interact with ASUB, the Mobile App provides an "in the hand" opportunity to deliver content and interact with the stakeholders.

V. Support and Training

This section of the strategic plan focuses on the support, training, and exceptional customer service needed by our internal users at all campuses. The continued efforts toward a customer focused help desk, improved communications, availability of training opportunities, and technical staff development are contained within the support and training section.

A. Customer Centered Information Technology Services and Support

Goal: To provide an exceptional, College-wide customer service infrastructure that provides faculty, students, and staff with a single point of contact for all support issues

As the College adopts more technology and implements it into business processes, a consolidated customer service center better facilitates the tracking and resolving of help desk related issues.

B. Information Technology Communication

Goal: To improve communication to the College on persistent Information Technology related problems and resolutions

College wide, information technology projects benefit from formal communications to the campus community. Email, campus messaging, and the College website are all forms of media used when communicating with users.

C. Faculty and Staff Training and Development Opportunities

Goal: To create a training program for faculty and staff that will ensure ample opportunities are available to learn campus technologies and facilitate professional growth

Training and professional development remains in high demand and providing a wide array of opportunities for faculty and staff is a focus of the College. While a resource library exists, other forms of training and knowledge sharing will be explored via peer or user groups and Arkansas State University system-wide training efforts to ensure proper training is readily available. Resources should be offered face-to-face, on-line, and virtual.

D. Information Technology Staff Development

Goal: To ensure information technology staff keep their professional skills current with industry standards and emerging technologies

It is a goal of Information Technology Services to provide adequate and formal training opportunities to all staff. This professional growth is a critical component for the College to have an enterprise level workforce providing technology services to all campuses.

VI. Security

This section of the strategic plan focuses on security measures and preventive risk analysis

exercises that are performed to better secure our information technology resources. The need for proactive information technology audits, creation of a security plan, implementation of updated security controls, and disaster preparedness rests in this section.

A. Audit Compliance Data

Goal: To initiate reviews and evaluations of systems or applications that contain College data to be prepared in the event an audit is necessary

The auditing of College systems not only ensures that capabilities exist to generate the data needed in the event of an official audit, but it also has other benefits. Proactive audits will help uncover potential threats of unauthorized access, improve network security and policy, strengthen data integrity, and help mitigate risks to our information technology assets.

B. Information Technology Security Plan

Goal: To adequately document the security policy of the College and follow best practices, with an annual policy review conducted by the Information Technology Advisory Committee

The need for an updated and continually reviewed information technology security policy is critical in the higher education industry. Documentation of this nature provides a critical framework that supports information technology security measures in future endeavors.

C. Improved Security Controls

Goal: To continually scrutinize current information and data security measures to ensure compliance

Protecting the information and data of the College is an exercise in both the physical and technology-based environments. Continually re-evaluating the security measures in place at each campus data center is critical as well as ensuring our decisions are in accordance with industry best practices. Additionally, the development of standards around new server deployments, the configuration of secure network communications, the monitoring of abused service accounts, and the implementation of an identity management solution are all initiatives that further enhance security controls.

VII. Technology Planning and Management

This section of the strategic plan encapsulates the initiatives listed above while focusing on the planning and management of information technology at Arkansas State University-Beebe. The funding of information technology, the financial stewardship of budgeted dollars, sustainability, and the planning of initiatives using survey and assessment data are focus points of the technology planning and management section. Budgeting and planning are essential to the transformation into digital learning, teaching and research as well integrating new systems and managing change. In some cases, planning and management may have to be staggered.

- Document and provide a clear plan for each proposed initiative
- Create project plans and request resources
- Complete projects, implement services, test solutions and enforce policies
- Establish a College-wide set of practices and procedures providing useful guidance and tools for the procurement and management of IT services and products
- Define college-wide, uniform best practices for IT to engage with the community to deliver complex IT solutions
- Utilize a lifecycle approach to IT procurement and vendor management

A. Information Technology Funding

Goal: To ensure information technology remains an integral part of the College's budget and that purchases are considered investments in providing education to students

In order to meet today's technology demands, the College must budget and plan to spend funds to ensure that the quality of education provided by our institution continues to improve. Investing in the appropriate technical infrastructure supports the teaching and business operations of the College, which allows the institution the ability to achieve each mission component.

B. Financial Management

Goal: To constantly look for ways to reduce overall expenditures, while maintaining effective and efficient service delivery

In today's technology environment, several options exist when it comes to purchasing the most suitable hardware or software for an institution; some of which are drastically more expensive than others. Considering the constraints faced by all public higher education establishments, it will be critical that future purchases and contract renewals be formally reviewed.

C. Green Information Technology

Goal: To maximize energy efficiency during the life of each piece of hardware, and encourage recycling end-of-life products into the state surplus property process

With the latest virtualization and consolidation technologies, the College can reduce the number of physical servers in use, which reduces both power and cooling demands. Furthermore, deploying power conservation solutions for desktops and reducing printing costs will also save resources. These initiatives, along with others will need to be analyzed and potentially implemented in order to build an information technology infrastructure that is sustainable.

D. Information Technology as a Services-Based Organization

Goal: To define information technology functions in terms of services while creating an online catalog of services being provided

Higher education institutions have seen benefits from the streamlining of business services that their respective information technology departments have undergone. Organizing an official service catalog offered by Information Technology Services will allow for additional efficiencies and creation of a framework that could facilitate the development of service level agreements.

E. Incorporation of Assessment and Survey Data

Goal: To leverage the data provided by assessment and survey applications and utilize the findings in strategic planning and management of information technology resources

The need to evaluate critical data prior to making strategic information technology related decisions is becoming more and more important. Having assessments and surveys conducted of our campus users provides the information needed to fulfill this initiative.

Processes and Procedures

College information technology processes and procedures (P&P) should exist in several different areas covered by the previous strategy sections. Each document drafted is a set of strategic directions that govern the usage of technology resources at the College. The Information Technology Advisory Committee reviews new processes and procedures. The group will approve, revise, and implement Arkansas State University-Beebe *Appropriate Use of Computer Resources Procedure* and the *Computer Software Use Procedure* to ensure compliance.

Information Technology Services Advisory Committee Structure

Information Technology Services Advisory Committee

The Information Technology Services Advisory Committee has representation from all four campuses and locations and meets on a quarterly basis. The charge of the committee as well as the positions of committee members are listed in Appendix A.

One of the committee's charges is to make information technology related recommendations to the Chancellor's Executive Council. Furthermore, ensuring compliance with state and federal laws and Arkansas State University System policies is another charge, while also providing additional recommendations as needed. The purpose and the authority of the committee is not changing with the drafting of the strategic plan, and the process of beginning work on specific initiatives noted in this plan will follow the current approval process.

Next Steps

Going forward, this plan will guide Arkansas State University-Beebe toward achieving new innovative advances in information technology. The Information Technology Service Advisory Committee has built this document as recommendations and proposed initiatives that will assist in re-engineering, if necessary, specific procedures, applications, services, and/or systems in the next few years. Furthermore, the Committee is enabling this document to act as a roadmap for guiding the continuous improvement of Information Technology at each of Arkansas State University-Beebe's campuses and locations that reflect future opportunities while working in tandem to accomplish the overall Strategic Plan of the College.

Appendix A:

Information Technology Services Advisory Committee Charge Document

Purpose: The Information Technology Services Advisory Committee works to further the College's Core Values of Student Success, Integrity, Diversity, Quality and Community by ensuring students, faculty, and staff have access to the information technology resources they need to effectively fulfill the mission of ASU-Beebe.

Meetings: The committee meets regularly as determined by the chair.

Reporting: A copy of the minutes of each meeting, including any subcommittee meetings, will be filed with the Chancellor.

Charge / Deliverables:
1. Update and assess the Information Technology Strategic Plan on an ongoing basis. Ensure the Information Technology Strategic Plan remains relevant as an advisory document to the Chancellor's Cabinet for both short-term and long-term development of the information technology needs of the College.
2. Strategically evaluate Information Technology Services projects in context to the overall institutional strategic plan.
3. Make recommendations to the Chancellor's Executive Council for complying with state, federal laws and regulations, as well as ASU System policies pertaining to information technology.
4. Evaluate the need for and relevancy of task forces to achieve the charges of this committee.

Membership 2020-2021:

VC/Chief Information Technology Officer	Leon Lewis*	Permanent by Position
Director of End User Training	Janet Liles	Permanent by Position

Associate Vice Chancellor --Finance	Andrea Glaude	Permanent by Position
Associate Vice Chancellor -- Institutional Advancement	Rose Mary Jackson	Permanent by Position
Dean Representative	Dr. Cheryl Wiedmaier	2020-2023
Vice Chancellor of Student Services	Dr. David Mayes	Permanent by Position
Registrar	Tyler Bittle	2020-2023
Campus Operations Manager – Searcy and Little Rock Air Force Base	LaShanda Owens	Permanent by Position
Campus Operations Manager – Heber Springs	Cody McMichael	Permanent by Position
Instructional Designer	Stephanie Ungerank	2019-2022
University Center Representative	Tawnya Waymack	2019-2022

*Denotes Chair(s)

Effective Date: 10/07/2013; Revised 2/2018; Revised and Approved by Cabinet 11.07.2018; Revised 8/2020

Appendix B

Appropriate Use of Computer Resources

Arkansas State University-Beebe (ASUB, College) provides computing, networking, and information resources for students and employees. This process and associated procedure apply to all users of technological resources provided by ASUB and ensures the appropriate use of desktop computers, portable computers, network resources and peripherals at the college. All consumers of technological resources are obligated to use such resources in an appropriate, considerate, efficient, ethical and lawful manner consistent with the rules and guidelines set forth in the associated procedure.

Users shall have no expectation of privacy and should be aware that data created with software licensed to ASUB and stored on hardware owned by ASUB is the property of the college.

Reference:
United States Code of Federal Regulations Title 18 Part I Chapter 47 Section 1030

Appendix C

Computer Software Use

The purpose of this guidance is to prevent copyright infringement and to protect the integrity of the college's computer environment. ASUB intends to comply with all computer software copyrights and to adhere to the terms of software licenses that the college acquires. Therefore, it is the expectation that no person shall use or cause to be used on the College's computer devices or systems any software that is not licensed to ASUB or does not fall into one of the following categories:

1. The software is in the public domain and does not have restrictions that would prevent its use at ASUB.
2. The software is covered by a licensing agreement with the software author, authors, vendor or developer, whichever is applicable.
3. The software has been donated to the college and a written record of the contribution exists along with a license for its use.
4. The software has been purchased by the college and a record of the purchase exists.
5. The software is being reviewed or demonstrated by the user in order to reach a decision about possible future licensing.
6. The software has been written or developed by a college employee for the specific purpose of being used at the college.

In all the preceding categories, copies of the authorization, agreement, license, or original media will be maintained by Information Technology Services (ITS).

It is also the expectation that there will be no copying of copyrighted or proprietary programs on computers belonging to ASUB. The software developer copyrights most software and, unless expressly authorized to do so, ASUB has no right to make copies of the software except for backup or archival purposes. College personnel may not duplicate any licensed software or related documentation for use either on college equipment or elsewhere unless expressly authorized to do so by agreement with the licenser. Unauthorized duplication of software may subject employees and/or the college to both civil and criminal penalties under the United States Copyright Act.

According to U.S. copyright law, any person who makes an unauthorized copy is liable

to the copyright owner for actual damages and profits or statutory damages of up to $200,000, plus court costs and attorney fees. In addition, in certain cases the infringer may be criminally prosecuted and subject to a fine of up to $500,000 and imprisonment of up to five years for first offenses.

All software will be installed by ITS. Users are required to inform the ITS in advance of any software needing installation.

Information Technology Services will conduct random audits of all college computers to ensure that the college follows software licenses.

Reference:
United States Code: Title 17 - Copyrights