

## **FY18 - Major IT Accomplishments**

### **Supporting the University's Long-Range Plans**

**Take necessary measures to ensure the campus—including people, facilities, networks and data—remains safe and secure**

- *Hired a new Information Security Officer (ISO), with responsibility for providing the vision and strategy necessary to keep electronic University data and infrastructure safe and secure.*
- *Hired a new Information Security Analyst (ISA), with responsibility for implementing operational aspects of the University's information security program.*
- *Engaged a consulting firm to conduct an external assessment of Missouri State's information security posture. Worked with external consulting firm to complete an online survey and in-person interviews with stakeholders, and perform network and software penetration tests across the Missouri State University System. Delivered an executive summary presentation of the final assessment report to the Board of Governors at the May 17 meeting.*
- *Formed the User Support Advisory Committee, reporting to IT Council, with a charge to reduce costs, increase efficiency, and mitigate risks in the delivery of user support services across the Missouri State University System. The committee's charge also includes developing configuration standards for client systems, which will result in a more consistently secure computing environment.*
- *Expanded and updated the Information Security Awareness Training Program, including making a video training module available to all faculty and staff, requiring completion of the video training module by all full-time staff (95% completion rate obtained by full-time staff), and provided advanced training to groups of staff working within units regularly processing sensitive information.*
- *Executed the Information Security Incident Response Plan, as the Information Security Office received reports of potential incidents, and worked with stakeholders across the University System (including the General Counsel's Office, Financial Services, and the Office of Internal Audit and Compliance) to continually improve incident response processes.*
- *Collaborated with the Information Security Executive Committee to develop and implement the Cloud Services Policy, which ensures sensitive University data is stored on safe, secure systems while providing the flexibility needed for faculty and staff to do their work on multiple devices and from any location.*
- *Collaborated with the General Counsel's Office and the Information Security Executive Committee to update the Privacy Policy, enhancing the notice provided to individuals regarding personal information collected by the University and limiting the use of that information.*
- *Installed a new video surveillance system and replaced many older cameras with newer ones with four times the resolution of the original cameras. The new system has far superior search tools, full-time recording, and other features that make recording and retrieving pertinent video faster, easier, and more reliable. Approximately 700 cameras are currently active and improving campus safety.*
  - *The new video surveillance system was integrated with the electronic door access system, which provides the capability to lockdown facilities via the surveillance system.*

- *Implemented new wired and wireless panic buttons at Carrington Hall (Office of the President, the General Counsel's Office, Title IX Resources, and the Office of the Provost), University Hall, and the new Magers Health and Wellness Center. When triggered, alerts sound, the Department of Safety and Transportation is notified and promptly investigates using the new surveillance system and immediately dispatches a safety officer, if needed.*
- *Installed an additional 70 doors with electronic access in the last twelve months. This improves accessibility while providing better security and logging access into restricted or controlled areas.*
- *Initiated a pilot project throughout the classrooms in Ellis Hall to determine the effectiveness and feasibility of using network-connected projectors to deliver notifications during emergencies.*
- *Transitioned responsibility for granting access to University information via software applications to the Information Security Office. Previously, access to University information was assigned by the same department that developed and/or supported the software applications. This transition has allowed for a separation of duties, resulting in better governance and control of access to University information.*
- *Created reports that may be generated on demand by the Information Security Office to detect malicious direct deposit banking information updates.*
- *Installed network firewall protection for the Counseling Center as part of the move into the new Magers Health and Wellness Center.*
- *Installed an intercom at the main entrance of Greenwood Laboratory School so the office staff can communicate with people desiring to enter the building. The area is also connected to the video surveillance and electronic door access systems to allow for automatic locking of the facility in the event of an emergency.*
- *Worked with the University Emergency Manager to record and report building rescue areas for each facility on campus.*
- *Initiated a security audit on web applications developed by Computer Services. This involves a full code review, verifying the use of best practices, reviewing what data is exposed to which user roles, and validating database security.*

### **Enhance technology infrastructure to better serve the university community**

- *Upgraded the Avaya phone system, which allows for implementation of third party phones, mobile applications, video intercoms, and IP faxing. The upgrade improved manageability, flexibility, and redundancy of the phone system and allows for expansion when University demand increases. Voice over IP (VoIP) is now the de facto standard for voice services that adds greater flexibility, easy mobility, and ultimately less overall cost than traditional telephones. This service has also been successfully deployed at the West Plains campus.*
- *Upgraded the voice mail system to a faster hardware platform with more capabilities, making it compatible with the University's cloud-based email system. This upgrade improved performance, increased manageability, and provided system redundancy.*
- *Implemented new networking and telecommunications infrastructures in multiple facilities to add hard-wired networks, wireless networks, voice, video surveillance, electronic door access, and other services. Buildings enhanced were Glass Hall, Ellis Hall, Professional Building, Cheek Hall,*

*Magers Health and Wellness Center, the Jordan Valley Innovation Center, and Hill Hall. Upgrades to the wiring in Woods House and installation of new services in Plaster Free Enterprise Center are underway.*

- *Enhanced wireless coverage, capacity, and speeds in all classroom centric buildings to accommodate faculty who utilize various technologies to deliver educational content during class sessions. Outside wireless services were installed for the Outdoor Seating Plaza at the Hammons Fountain.*
- *Completed the transition to the Software as a Service (SaaS) hosting solution for the Blackboard Learning Management System (LMS). All classes will be taught in the new environment beginning with the summer 2018 session. This new hosting solution will position the University to continue with the expansion of online class offerings by easily scaling to accommodate growth in enrollment numbers.*
- *Completed the renovation of the Cheek Hall open-access computer lab which serves not only as a computing facility for all students, faculty, and staff, but also hosts the University's Help Desk and micro support services IT staff members. This renovated facility greatly improved the efficiency of the Computer Services departmental staff when providing IT-related support services.*
- *Finalized the plan, established a project account of \$245,000 to track expenditures, and completed the process to replace obsolete ERP hosting computing hardware. New backup and recovery systems were upgraded in association with this project to ensure recovery capabilities are in place in the event of a disaster.*
- *Implemented the new My Missouri State portal, which supports a more mobile device friendly design, upgraded single sign-on capabilities, organized content to meet student needs, improved capabilities to comply with website accessibility standards, resolved BearPass ID lockout issues, and regularly provides usage analytics to help guide future enhancements.*
- *Deployed upgraded client systems management software throughout the distributed IT support staff areas of the Springfield and West Plains campuses to enhance infrastructure capabilities and information security protection layers. Standard classroom and computer lab images were created and centrally deployed using this software, resulting in reduced operational and support costs.*
- *Extended advanced client systems management functionality to Apple devices by implementing Apple School Manager. The new capabilities for device management and software provisioning have resulted in increased security, lowered costs, and enabled new opportunities for student learning and workforce mobility.*
- *Initiated the project to migrate files from local file servers and workstations to the Office 365 environment. This large-scale migration will provide increased storage, security, and reliability, while reducing operational and support costs, and providing new capabilities for collaboration. This migration project is a joint effort between Computer Services, the distributed IT support staff, and the IT Services departmental staff on the West Plains campus.*
- *Continued the implementation of the new Customer Relationship Management (CRM) system to improve student recruitment, admissions, and retention.*
- *Collaborated with the Office of Human Resources to develop and implement a new online Appraisal and Development Plan (ADP) system in support of the University's performance-based compensation system and the professional development of employees within the organization. This university-wide system replaces the former paper-driven process and increases access and*

*transparency for employees and supervisors, provides increased reporting and tracking capabilities for the Office of Human Resources, and reduces the overall effort required for the annual appraisal and development process.*

- *Implemented a student-focused mobile friendly online system (iGrade) for rating instructors near the end of each term. Previously, this process required nearly 70,000 paper forms distributed manually to classrooms along with traditional instructor evaluations. This initiative not only reduces expenditures due to the cost of paper forms, but also saves valuable staff time in processing the forms.*
- *Worked closely with Enrollment Management and Services to produce a complex data-mining project under the guidance of Ruffalo Noel Levitz (RNL). Data to be analyzed was delivered quickly, accurately, and with little need for modification by RNL.*
- *Continued the migration efforts to Administrative Banner version 9. This upgrade will replace Internet Native Banner with an improved customer interface and will significantly reduce customer support issues. These updates are being coordinated with administrative and IT staff from both the Springfield and West Plains campuses.*
  - *Administrative Banner modules on both campuses are expected to be at version 9 by December 2018.*
- *Developed a new Active Directory management and security model for client systems. Centralized user support staff from the Springfield campus trained the West Plains and the distributed IT support staff throughout the University System on the new model and assisted in migrating over 6,000 client systems to the new model, resulting in major improvements in client system security and greatly reduced operational and support costs.*
- *Collaborated with distributed IT support staff and the IT Services departmental staff on the West Plains campus to create standardized client system management processes and application deployment packages that are being shared between multiple units, resulting in reduced operational and support costs.*
- *Upgraded networking infrastructure to the desktop outlets capable of running at 10 gigabits per second (10 times faster than standard outlets) at multiple locations in Craig and Strong Halls in support of the Media, Journalism & Film department.*
- *Initiated a project to improve the networking infrastructure in and to the residence halls to support the transport of television services over the University's IP network. The upgrades include increasing bandwidth to the buildings and upgrading wireless access points to provide higher density capacity in the majority of residence halls on the Springfield campus. Work commences on May 18, 2018 and is scheduled to be completed by August 1, 2018.*

#### **Continue to coordinate operations between the West Plains and Springfield campuses**

- *Collaborated with the IT Services department on the West Plains campus to update the West Plains component of the Core Information Systems and Services Disaster Recovery Plan. This plan will guide Springfield and West Plains IT staff members in recovering Missouri State's information technology infrastructure in the event of a disaster.*
- *Provided information security awareness training to all West Plains full-time staff through a video training module produced by the Information Security Office on the Springfield campus.*

- *Worked with West Plains IT support staff members to upgrade wireless access points in the Grizzly House and Melton Hall. Implemented outside wireless services at locations in West Plains, which includes the student recreation area outside of the Grizzly House and the area outside of Looney Hall.*
- *Continued to work in conjunction with Planning, Design & Construction and West Plains IT support staff on the connectivity, infrastructure, and all communications services for the new Hass-Darr building.*
- *Coordinated efforts to upgrade to the Administrative Banner 9 version of the ERP systems utilized on both campuses via bi-weekly meetings.*
- *Collaborated with the IT Services departmental staff on the West Plains campus to enhance the software patch management infrastructure, increasing the security and reliability of the West Plains' campus computing workstations.*
- *Continued collaboration between Springfield and West Plains IT support staff members by actively participating in monthly meetings with IT Council, Information Security Executive Committee, Information Security Operations Team, Enterprise Resource Planning Committee, User Support Advisory Committee, Learning Management System Advisory Committee, Distance Education Committee, and the Instructional Technology Advisory Committee.*
- *Continued participation of Springfield and West Plains IT support staff members in weekly cross-training and collaboration sessions focused on Office 365 and client systems management. Office 365 tools and features, including video and audio conferencing and white boarding, are used to facilitate these sessions, lowering barriers to participation and limiting travel time and costs.*
- *Completed the new Banner-to-Blackboard database interface as well as a new web system that merges duplicate general person records. These projects are possible due to the shared database interfaces between the Springfield and West Plains ERP systems.*
- *Initiated cooperative development efforts with the University's Disability Resource Center to analyze and assess web applications for ADA usability. This partnership enhances efforts to achieve ADA compliance and improve support services by working directly with users of assistive technologies on both campuses.*
- *Conducted the annual IT retreat on the West Plains campus on June 28, 2018, which involved IT support staff from the IT Services department from West Plains and the Information Services division from Springfield. Focus of the retreat was to review IT-related accomplishments in FY18, plan IT-related projects for FY19, and enhance strategies to improve collaboration between IT support staff from both campuses.*