Board of Governors – February 5, 2016 Meeting Technology Infrastructure Information

1. Support Personnel -- Throughout the Missouri State University System, there are 145 centralized and distributed IT support employees.

IT Council – http://www.missouristate.edu/itcouncil/

- Responsible for planning, coordinating, and reviewing major information technology initiatives.
- Ensures initiatives are aligned with the University's mission and planning documents.
- Reviews large information technology purchases.
- Develops information technology policies, procedures, and standards.

Information Services Division – Springfield Campus (74 FTE employees) http://cio.missouristate.edu/

- Computer Service Department
 - o Systems and Operations, Management Information Systems, User Support Services
- Networking and Telecommunications Department
- Information Security Department
- BearPass Card Office

Distributed IT Support Staff – Springfield Campus (50 FTE employees)

• IT support staff located in various colleges and departments across campus.

Faculty Center for Teaching and Learning (9 FTE employees) http://www.missouristate.edu/fctl/

- Instructional Designers work with faculty to deliver online courses.
- The Classroom Instructional Technologies (CIT) unit assists with 300+ technology-enhanced classrooms.

IT Services Department – West Plains Campus (12 FTE employees) http://wp.missouristate.edu/IT/

- Enterprise Systems and Operations
- Management Information Systems
- User Support Services
- **2.** Hardware, Software and Related Services Other components of the University's technology infrastructure include:

Networks – The University's networking and telecommunications infrastructure provides the University community with most types of electronic communications.

- Ethernet connectivity across the University system.
- Approximately 18,000 network access points and over 5,000 phones.
- Infrastructure recently upgraded to handle ten times the speed.
 - o (130 terabytes (130,000,000,000,000) of data per month).
- Wireless networks throughout the University system.
 - o Approximately 11,500 wireless devices connect to the network daily.
 - Over 1,450 wireless hot spots provide service within 100% of University buildings.

Computing and Telecommunications Centers – The University has two computing centers on the Springfield campus and one on the West Plains campus. These centers house the equipment utilized by IT staff to provide the University community with all technology services, software, and support.

Information Security – Missouri State uses a layered approach for information security.

- Layer 1 Networking Infrastructure
 - o Network firewalls block approximately nine million corrupt packets per day.
 - o Intrusion detection and prevention systems stop probes and attacks (100,000 1 million per day).
- Layer 2 Facility and Computing Systems
 - o Physically secure, technology-rich facilities ensure safe access.
 - o Anti-virus and filtering software protect computing systems.
- Layer 3 Policies and Information Security Awareness Program
 - o Recently updated Information Security Policies can be reviewed at: http://www.missouristate.edu/policy/Ch12_ComputerPolicies.htm
 - o New students receive information security briefings during orientation.
 - o Employees receive security training prior to obtaining access to restricted information.
 - o Various techniques (including social media) are used to deliver information, security notices, and best practices.
- Layer 4 Identity Management and Access Control
 - o User IDs and passwords are assigned for authentication prior to allowing access.
 - o Access to information and software applications are granted based on an individual's job.

Information Systems – Information systems provide a variety of self-service applications.

- Banner Enterprise Resource Planning Software integrates Missouri State's many business technology needs into one integrated software system.
- Missouri State develops and maintains numerous web applications for fee waivers, advising notes, projected course offerings, personnel actions, etc....
- Missouri State developed and maintains the My Missouri State Web Portal to establish a single point of entry for students and employees to utilize University information systems.
- Blackboard Learning Management System provides the software needed to administer, document, track, report and deliver courses entirely or partially online.

Open-access Computer Labs (http://cio.missouristate.edu/USG/open-access-computer-labs.htm) – The University has three open-access computer labs in Springfield and one in West Plains. These labs are available for up to 24 hours for all students, faculty, and staff. In addition to the open-access computer labs, the University has 85 discipline specific computer labs located in various colleges.

Help Desk Services (http://helpdesk.missouristate.edu)

- Main Help Desk is located in Cheek Hall on the Springfield Campus.
- Services available to all students (including online), faculty, and staff 24 hours a day.
- Contact by phone (836-5891), in person, email, or web chat.

3. Vision for Information Technology

Dr. Susan Grajek, Vice President of Data, Research and Analytics at EDUCAUSE, spoke at Missouri State in March 2015 as part of the University's visioning project. Her presentation was titled "Top 10 IT Trends for 2015". Immediately following this page is Dr. Grajek's article that parallels her presentation. This article provides a good background for our discussion.

4. Discussion Questions

- How can we leverage our existing resources to optimize the use of technology in teaching and learning? How do we determine the appropriate level of technology to use in the classroom and in teaching online?
- How can we continue to develop a technology infrastructure that responds to changing conditions and new opportunities, many of which may not yet have been discovered? What policies and best practices exist to assist us in this regard?
- How can we adapt our existing resources to support mobile, online, cloud, and Bring-Your-Own-Device environments? What policies and best practices exist to assist us in this regard?
- How can the University continue to compete in hiring, retaining, and training qualified information technology staff within the available budget?