

January-June 2017

# Accomplishments Report Information Services



## Introduction

Information Services is a strategic asset for UMKC's missions of teaching and learning, research, service and economic development.

### MISSION

We are a strategic asset for UMKC's missions of Teaching, Learning, Research, Service, and Economic Development.

### 2017 GOALS

- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access
- User technologies and support that enhance and facilitate Teaching and Learning, Research, Service, and Economic Development
- Effective and efficient management of resources
- Accurate, understandable, and accessible communication, documentation and resource use
- Continuous improvement in services, facilities and professional development
- Further automation of campus procedures to increase our efficiency as a campus
- Investigate new sources of revenue to fund campus initiatives

### FY2017 IS PROJECT LIST & POINT PERSON

- Campus New Construction/Renovation – Guggenmos/Technology Management Services
  - Cherry Hall 4<sup>th</sup> Floor Renovations
  - Medical School 5<sup>th</sup> Floor Renovations
  - Chemistry-Biology Renovation – Phase 1
  - Dental School MSSU Expansion
  - Whole Foods Development
  - Robert W. Plaster Free Enterprise Center
- Civitas Analytics - Guggenmos/Technology Management Services
- Cockefair Hall Infrastructure Upgrades – Guggenmos/Technology Management Services
- Performing Arts Center Infrastructure Upgrades – Guggenmos/Technology Management Services
- Blackboard Upgrade to Ultra – Guggenmos/Technology Management Services
- ILE Classroom Lifecycle Upgrades Phase 2 – Guggenmos/Technology Management Services
- IS Multi-Department Inventory Tool – Guggenmos/Technology Management Services
- Campus Building Security – Guggenmos/Technology Management Services
- Expansion of wireless coverage – Schonemann/Network Architecture
- Cisco Jabber Collaboration Software – Schonemann/Network Architecture
- Cisco WebEx Online Meeting/Conferencing Software – Schonemann/Network Architecture
- Building Network Switch Refresh – Schonemann/Network Architecture
- Data Center Network Switch Refresh – Schonemann/Network Architecture
- Campus Core Network Switch Refresh – Schonemann/Network Architecture
- Exchange 2016 Upgrades – Schonemann/Network Architecture
- IP Address Management – Schonemann/Network Architecture

- Investigate 3-D Printing – Reisenbichler/Support Services, Guggenmos/Technology Management Services
- UMKC Dashboard Upgrade/Redesign
- UM Data Hub

#### FY2017 Shared Services Project List

- Accounts Management – Goodenow/Information Access
- Establish Enterprise Architecture – Schonemann/ Network Architecture
- ITSM – BMC Remedy Deployment – Reisenbichler/Support Services
- UM Network Architecture – Schonemann/Network Architecture
- ERP Review – Goodenow/Information Access
- Core IT – Fritts/CIO
- Knowledge Base – Reisenbichler/Support Services
- SecureAuth Implementation - – Guggenmos/Technology Management Services
- Implement New UM IT Project Portfolio Management Tool - Guggenmos/Technology Management Services

## Executive Summary

Information Services is a strategic asset for UMKC's missions of teaching and learning, research, service and economic development. We continued to make progress toward our defined goals and this document details the progress we have made during the second half of the fiscal year 2016.

During this past review period, IS Support Services upgraded an additional 30% of the campus desktops to Windows 10. Before school starts ISSS will upgrade 1,300 campus academic labs to use Windows 10 as well as installing Office 2016 and 200 other pieces of software. 468 computers (many including softphones as an alternative to desktop phones) were purchased, imaged, configured and deployed as part the Workstation Replacement program over three months early in the year. The campus transitioned to new password and authentication tools provided by SecureAuth. The Call Center handled over 13,500 support requests with over 95% very satisfied based on customer service response surveys.

In the Shared Services area, we worked with our sister campuses on ITSM and 0365 upgrades. Locally we are close to signing MOU agreements with the School of Education and University Libraries to provide desktop support and other IS services.

Campus Technology Services completed technology upgrades to 29 ILE rooms to HD widescreen digital video & projection systems, enhanced audio processing with web conferencing, and voice over IP features. Our Video Services group supported 793 hours of ITV distance learning. The additional hours show an upward trend continuing the last few years.

The Project Management and Infrastructure Services departments worked a number of high profile projects including the following:

- School of Dentistry expansion with Missouri State in Joplin
- School of Medicine infrastructure replacement and floor renovations
- Chemistry/Biology Building Renovations
- Civitas Analytics Implementation
- Wireless Network – Dorms and Apartments
- Whole Foods projects
- Exchange 2016 projects – UMKC serving as disaster recovery location for the UM System

Efforts of the Information Access Division were notable for the improvements made in measurements of customer response times, despite a steady increase in requests for service. Internal applications completed new software/application solution for University Libraries, Continuing Education, and undergraduate research. The campus expanded our dive into Salesforce with three projects and supported the campus goal of student retention with additional data and reporting from uAchieve.

ITS worked with Blackboard and other campus groups to move our Blackboard instance from Blackboard's Managed Hosted environment to their SaaS (software-as-a-service, cloud-hosted) environment during the last half of 2016, and completed the work in January 2017. The migration resulted in several Blackboard outages during the early part of the spring 2017 semester, but we worked with Blackboard on remediation steps, and it has been stable since then. Because of our issues with this migration, ITS, in partnership with UMKC Online, began looking at the Canvas LMS as a possible

replacement for Blackboard in the future.

Proctoring products like Respondus Monitor, and video services such as Panopto and Kaltura, continued to be popular among faculty and students. Emerging technologies in the response-ware realm prompted us to develop and implement a pilot of Top Hat, a potential replacement for Turning Technologies Clicker products. This pilot will run through fall semester 2017.

Foundation Services hosted over 500 servers in our local data centers or via Amazon Web Services.

Academic Enhancement supported live streaming or video events for over 20 different units on campus.

The UMKC networking team continued work on the 10-year building-wiring plan. Category 6 infrastructure upgrades were completed in the School of Medicine and progress continued in Cockefair and Scofield Halls. The group also worked on renovation/new constructions projects with Whole Foods, the downtown arts campus and the Chemistry and Biological Sciences buildings.

UMKC phone operators handles ~34K phone calls with 75% of the calls being automatically routed and the remainder requiring human interaction.

ISS upgraded the edge campus firewall with the newest generation of equipment, enabling higher traffic speeds for the campus Internet connection. The original traffic limit was in the five Gigabit/sec range, the new limit is in the 10 to 15 Gigabit range. The campus data center firewall was replaced with the original campus edge firewall, allowing a significant speed increase for traffic through the data center. The original limit was in the 2.5 Gigabit/sec range, with the extra filtering options disabled on the migrated firewalls, we can now transmit 8 to 10 Gigabit/sec. The ISS team worked to disable Windows vulnerabilities and decrease the amount of spam and phishing attacks on students, faculty and staff.

Looking forward Information Services is establishing new long range staffing and budget planning processes. IS exploring new services and offerings to continuously improve the service and offerings for students, faculty, staff and the entire UMKC community.

## Computing Facilities

We had **13,013** distinct individuals use computing sites between 1/1/2017 and 6/30/2017. This represents a large percentage of our student base and exemplifies the usefulness of these facilities.

In addition to the physical computer sites, we had **1,574** distinct individuals who logged into RemoteLabs a total of **12,869** times.



IS also did a major overhaul of the Interactive Learning Classroom, which consisted of replacing 48 computers.

**Print Quota.** Performed application upgrades on PaperCut across the student computer labs. This adds additional functionality to students and ensures we are up-to-date.

### Other Projects

**American Conference for Irish Studies (ACIS).** Provided technical support for the annual weeklong ACIS conference. This large event spanned several buildings on campus and required dedicated tech support.

**Encryption.** Expanded the use of encryption (BitLocker & FileVault) on campus laptops and desktops. This additional security ensures that if a computer is lost or stolen UMKC data is not at risk.



**PCI.** We have seen an increase in PCI requirements, both from a technical perspective as well as from an audit standpoint. We have updated our PCI Image to meet current requirements. We also have created several templates within ITSM to keep track of all changes to our PCI environment.

The Lab Management Office maintained operations in six IS-managed general use student computer labs, eight restricted access labs, and supplied one associated computer classroom.

- Maintained sufficient student employees to staff labs by processing 60 applications for Student Assistant positions, conducting 58 computer skills tests, interviewing 30 prospective new hires, and hiring 38 new Student Assistants for IS-managed labs
- Over 138,400 print jobs were printed in IS-managed general-use student computer labs, totaling over 953,200 pages



### Campus Wide - Enterprise Support

**AirWatch.** Continued to expand the use of our Mobile Device Management solution, AirWatch, across both UMKC and the other campuses. This tool is valuable for increasing efficiencies in managing mobile devices as well as protecting University data. IS is currently in the process of upgrading to AirWatch 9.x.



**SCCM.** Continue to use Microsoft's SCCM as a key part of our asset management solution and our preferred method of software installation. Over the last 6 months, SCCM was used to install **34,103** pieces of software across campus. We also imaged **237** lab computers using the Operating System Deployment functionality of SCCM.



We performed a major upgrade of SCCM to the current branch, 1702. This allows us to continue to manage the new Windows 10 builds across campus.

**Casper.** Expanded the use of Casper, our asset management tool and software deployment tool, for Apple computers. Some of the new initiatives include:



**Thin Imaging.** Due to upcoming changes in Mac OS, we have started investigating thin imaging. This represents a major change in how Apple computers are deployed.

**Web pushes.** Fully implemented the ability for technicians to deploy software to Mac OS computers via the web via a custom-built portal. This provides technicians a single location to deploy software for both Windows and Apple computers.

**Mac OS Images.** Updated all Mac OS images to the latest versions of Mac OS

**Upgrade.** Performed an upgrade to Casper to gain additional functionality and patch security vulnerabilities.

**Naming Conventions.** Established standards for policies, smart groups, and collections.

**Asset Management.** Examining new methods for collecting asset information on Mac OS and leveraging Casper to improve our reporting ability. We expect this to move to production in the next 6 months.

**Reporting.** The Enterprise Support team updated many of the online reports and revamped all of the ITSM reports for UMKC Central. We also created/updated several of our asset management reports for both hardware and software to provide information that is more detailed.



**Website.** Updated the IS website throughout this period with meeting notes, new product information, new software and hardware options, etc.

**Software updates.** Planned, tested, and deployed several updates to all Windows campus computers to ensure software is up-to-date. This is done to both give our customers the latest products and tools but also to limit vulnerabilities. Over **150 SCCM** packages were created during this period.

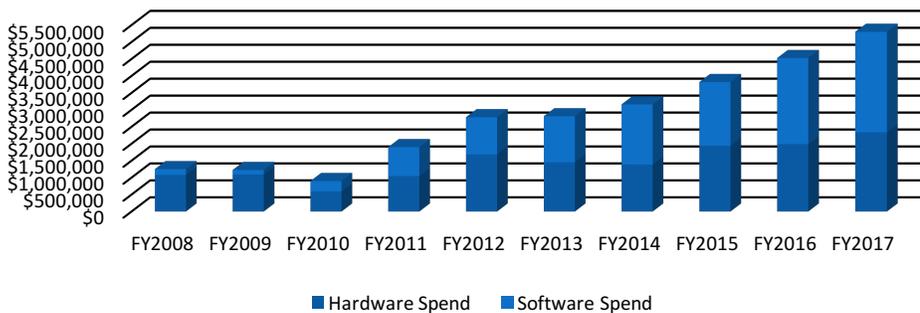


**Supported hardware.** Over the last 6 months, we had changes on both our Dell and Apple standards. With Dell we saw new laptops and desktops and a brand new docking solution. Apple saw updated iMacs and MacBooks. Extensive testing and image updates were completed.

## Totals and Trends in IT Procurement

- Purchased a little over \$1,500,000 worth of IT hardware and software, including computers, tablets, software, web services, subscriptions, service warranties, maintenance agreements and usage fees
  - This represents a 5.5% decrease in total spend and a roughly 10% drop in the total number of requests processed over the same period one year ago
- However, this decrease does not even create a dip in the trend of explosive growth in orders and spend per fiscal year as measured over last decade
  - For the first time, Information Services processed over \$5,000,000 during the last fiscal year
  - This represents growth of 17% over the previous year
- The successful consolidation of IT purchasing for academic units over the last few years is a primary growth factor in spending and activity year over year

IT Procurement Spend by Fiscal Year (2008-2017)



## IT Procurement: Distribution by Vendors and Units

