MISSION

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

2014 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.

The processes for achieving each of the above goals are listed on the following two pages.

2010 IS PROJECT LIST & POINT PERSON

- ILE Classroom Lifecycle Upgrades – Guggenmos/Classroom Technology Services
- IP Video Distribution – Guggenmos/Classroom Technology Services
- Infrastructure improvement (building cabling) – Johnston/Telecomm & Networking
- VOIP rollout – Johnston/Telecomm & Networking
- E-learning Initiative – Goodenow/Information Access
- Expansion of wireless coverage – Johnston/Telecomm & Networking
- Disaster Recovery – Schonemann/Networking
- Server Virtualization – Schonemann/Networking

Details on each of the above projects can be found in the individual sections for the responsible department.
Educational Technology Services
Goals and Objectives Update
August 2010 – December 2010

IS PROJECT - ILE Classroom Lifecycle Upgrades
During this review period we have completed 8 of the 57 ILE classroom lifecycle upgrades. We are 14% complete with this project and on schedule to be 100% completed in May of 2012.

Our partnerships with fellow UMKC departments have played a critical role in keeping this project on schedule. We work closely with the Registrar’s office to coordinate class moves during the day to prevent working nights and weekends. We also work closely with Networking and Telecommunications to configure and add each room to a virtual network for remote control and remote adjustment of critical components. We appreciate the ongoing support from the Registrar’s office and fellow IT departments.

Critical Issues
- Project completion is dependent on classroom availability for upgrades. Most classrooms are occupied from 7am to 10pm daily. Allotting time in rooms for upgrades will be difficult. Some overtime may be required. There is potential for schedule creep if we run into space availability issues.

IS Goals Supported
- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.

ILE Maintenance Upgrades
Proposed Implementation Timeline

Percent complete

- Q3 2010: 14%
- Q4 2010: 31%
- Q1 2011: 48%
- Q2 2011: 66%
- Q3 2011: 83%
- Q4 2011: 100%
**IS PROJECT - IP Video Distribution System**

We are still in the early phases of concept design for an IP Video Distribution System for the UMKC campus. The goal is to equip UMKC with a video-over-IP digital media system. This system will improve the University’s ability to communicate through signage displays, televisions, and desktop computers.

There are aspects of this project that could transition into a shared services project as other MU campuses have similar needs. The design of the demo system will include the ability to scale and distribute system wide.

*Systems currently on the market provide:*
- Desktop Video
- Enterprise TV delivery
- Video-on-Demand library access
- Pre-scheduled programming
- User authentication
- Emergency notifications (signage)
- CMS integration
- Live-streaming events intra-campus
- Group instruction
- Dormitory TV service
- Campus TV station delivery
- Digital signage content distribution

We plan to have the design completed for a demo system and ready for consideration by the end of Q2, 2011 with the hope to use 2011 end of year funds to purchase the hardware.

**Critical Issues**
- Impact on network bandwidth will need to be researched if all video transport will be done via the IP infrastructure.

**IS Goals Supported**
- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.

**Increase professional development opportunities for staff**

During this review period we selected a number of new technical training modules for CTS staff. We have added two InfoComm AV courses as requirements for all FTE technicians. We have also added eight hardware specific programming/configuration courses/tracks to allow staff to specialize in areas that align with their individual career goals. We continue to provide training materials for in-house training and allow travel for relevant courses/seminars. We plan to take advantage of the new SkillSoft and HR training modules as needed to develop staff’s soft skills.

**Critical Issues:**
- Making time for our staff to work on their professional development skills has to receive a higher priority to continue the departments’ capabilities to complete custom AV projects.
- Allowing staff to attend training during working hours impacts our level of service and will need to be accounted for in scheduling tasks and expected completion dates on projects.

**IS Goals Supported:**
- Effectively and efficiently manage resources.
- Continuous improvement in facilities, service and professional development.
Increase awareness and feedback surrounding the ILE Classroom systems

During this review period we have increased ILE awareness and our ability to field user feedback. We developed an “ILE Feedback” form to gather faculty feedback on ILE systems. The form is linked on all ILE PC desktops and on the ILE website for easy access. We are communicating ILE changes/ upgrades via UMatters, USuccess and the Provost’s Blog. We also plan to use the new IT/IS blog for communications as soon as it goes live. This will provide subscribers with relevant updates automatically.

We continue to work with the Registrar’s office to market ILE user training to and conduct training sessions with faculty as requested. We are currently working on a project with IA to upgrade one of their studio classrooms to provide ILE user training in conjunction with their Instructional Technology classes.

IS Goals Supported
- Provide user technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that is accurate, understandable and accessible
- Continuous improvement in facilities, service and professional development.

Provide advanced technical expertise and services to UMKC academic units, and UMKC departments

We have worked with several academic units and departments to design, install, and in most cases, provide ongoing support for large number of complex AV systems during this review period.

Completed Projects - $832,988.98
- Bloch 12/13 Renovation – Upgrade of Full ILE System to dual projector
  Est. Lifecycle - $32,324.05
- Durwood Conference Room – Custom AV system
  Lifecycle cost - $5,630.29
- ITS Location-Remote Equipment – Design/Procurement
  Lifecycle cost - $157,546.06
- Katz Hall Renovation – 3 Full ILE, 1 ILE Hybrid, and 2 Custom AV Systems
  Lifecycle cost - $147,891.22
- PAC/Grant Digital Signage – Added 4 Scala signage displays
  Lifecycle cost - $27,343.57
- PAC Green Room LCD – Replacement
  Lifecycle cost - $2,215.40
- Scala Digital Signage – Installed new centrally managed Scala digital signage infrastructure for campus use.
  Lifecycle cost - $8,020.00
- Student Union – 13 ILE AV meeting room systems, 17 digital signage locations, and a building wide video/cable distribution system
  Est. Lifecycle cost - $407,222.29
- Toy & Miniature Museum – Upgrade GUI and configuration of existing theater system
  Lifecycle cost - $1,304.00
- FACET ILE Relocation and 1 Partial AV System
  Lifecycle cost - $3,214.00
- Projector Maintenance/Upgrades – 23 Projectors – Lifecycle cost - $39,583.10
- Criminal Justice & Criminology - Travel Projector – Lifecycle cost - $695.00
- Upgraded all eInstruction (clicker) capable ILE Classrooms with new TurningPoint receivers
- Coordinated numerous campus security hardware installations

**Current Projects – Implementation Phase – $473,828.05**
- ILE Maintenance 2010 Project – IS project to upgrade 58 ILE classrooms
  Lifecycle cost – $304,346.50
- Miller Nichols Library 114 & 303 – 1 Full AV system, 1 Partial AV system
  Est. Lifecycle cost - $24,351.12
- Miller Nichols Library 1st & 2nd Floor Renovations – 1 ILE Hybrid AV system, 1 dual partial
  AV system, digital signage relocation, and 5 group study areas
  Est. Lifecycle cost - $138,272.88
- Working with Lenel Special Services to repair parking script for Parking Control
- Student Fee Kiosk Demo - 1 Custom kiosk
  Lifecycle cost - $5,900.00

**Current Projects – Design/Planning Phase – $605,923.18**
- Bloch School 101 – Full ILE classroom
  Est. Lifecycle cost - $50,000.00
- Cherry Hall ILE – 2 ILE Hybrid classrooms, 1 Partial AV System
  Est. Lifecycle cost - $23,401.48
- Grant Hall 227 – Full ILE classroom/recital hall
  Est. Lifecycle cost - $59,958.67
- Campus IPTV System – UMKC cable-digital signage distribution system
  Est. Lifecycle cost- TBD
- 4301 Distance Education Upgrade
  Est. Lifecycle cost - $239,000
- Collaborating with the School of Dentistry to program new classroom AV systems.
- Law Library Renovations – Full ILE classroom with multiple collaboration displays + multi-
  display video wall
  Est. Lifecycle cost - $200,000.00
- Law Digital Signage – Multiple Signage displays
  Est. Lifecycle cost - $TBD
- SCE Labs ILE – 2 ILE Hybrid, and 2 Partial AV Systems
  Lifecycle cost - $33,563.03
- SOP Distance Education Program Lifecycle Upgrades
  Est. Lifecycle cost - $TBD

**IS Goals Supported:**
- User technologies and support that enhance and facilitate research, service, teaching and
  learning and economic development.
- Effectively and efficiently manage resources
Other Notable Accomplishments:

- During Fall Semester 2010, the average Full ILE classroom utilization was roughly 18% higher than that of Non-ILE classrooms. Hybrid ILE Classrooms utilization was roughly 8% higher than that of the Non-ILE classrooms.

![Classroom Hour Utilization Chart]

- During Fall Semester 2010, 94% of all support tickets assigned to Classroom Technology Services were resolved within a 24 hour period. Of this 94%, 40% were resolved within 1 hour.

![Ticket Resolution Time Chart]

- Partnered with IA on a Student Affairs sponsored kiosk project. Project includes a custom web interface to collocate existing student pay services as well as designing, procuring and installing multiple kiosks at various locations. Demo kiosk schedule to be in place by the end of Q1 2011.

- Worked with IS/IA to develop and communicate a new Single Sign On password change utility for UMKC faculty, staff and students. This web-based tool provides users with clear and concise information about password requirements making the change/reset process fast, easy and reliable. In addition, courtesy email notifications are sent several days in advance of password expirations so that users can select a convenient time to reset their password.
• The IS/IA Web Committee is working on a project to update the IS/IA website with a new audience based look and feel, additional IT resources and relevant content. Committee members include: Justin Guggenmos (Chair), Brian Anderson, Vishal Kurup, Lynn Magrone, Deborah Phillips, and Janet Carnet. Phase one “New look and Feel” is scheduled to be completed by the end of Q1 2011. Phase 2 “Content Updates” is scheduled to run through the end of 2011.

• Worked with IS/IA to convert the University Center computer lab to a secure testing lab for faculty. Coordinated the design and installation of new surveillance and card access systems for this space.

• Partnered with Support Services and Infrastructure Services to renew the support agreement with the Toy and Miniature Museum. Added time and materials support for existing AV systems.

• Working with Infrastructure Services to manage the project management aspects of the Shared Services - Network Architecture Engagement Project

• Completed $832,988.98 of AV projects during this review period.

• Increased the number of ILE classrooms from 129 to 136

• Increased the number of supported AV Systems/Conference rooms by 28 locations

• Completed ILE Classroom system maintenance in all ILE Classrooms during break.

• Represented IS/IA on the Campus Security Assessment Committee. Worked with group to develop processes for requesting service for existing security systems and requesting purchase and installation of new security systems.

• Completed the UM Collaboration Calculator to aid in system wide IT collaboration.
Notable Accomplishments within Information Services Security:

- Assisted Exchange 2010 Migration
- Worked with 7 products for Security review for campus use
- Assisted with inter-campus bandwidth tests, evaluating the effects of current security devices with inter-campus network video
- Handled 46 Copyright infringement complaints
- Assisted with cleanup of 4800 student mailboxes off of the old email system
- Assisted with changes needed to support Microsoft Live Meeting for class broadcasts
- Assisted with lab problems with SCE lab image

Network Traffic Events past 6 months
Key Initiatives

- Completed the annual Provost’s workstation replacement program for the campus. This streamlined, volume purchase program provides the campus with a convenient customer-focused method for replacement of campus computers. UMKC saved thousands of dollars on computer equipment through this annual volume purchase. More purchasing details can be found under the hardware-software section of this report.

- A new password change utility was developed for faculty, staff and students last November. The web-based tool provides users with clear, concise information about password requirements and allows them to easily manage their SSO password. Coupled with this utility is an advanced email notification system which provides helpful reminders to our users allowing passwords to be more conveniently managed.

- MS Office 2010, Mac Office 2011 and Windows 7 deployments continue. Windows 7 upgrades are typically done when computers are replaced or re-imaged. Windows 7 is now the campus operating system standard with over 2700 migrated. MS Office upgrades for IS customers are being scheduled with a goal of having most Support Services’ users migrated by next fall.
Software deployment progress:

- **Office 2010**
  - 39% for ISSS clients (compared to 2% on 7/31/2010)
  - 14% for entire campus (compared to 1% on 7/31/2010)
  - A total of 1326 systems are now running Office 2010

- **Mac Office 2011**
  - Approximately 100 deployments to date

- **Windows 7**
  - 62% for ISSS clients (compared to 49% on 7/31/2010)
  - 39% for entire campus (compared to 35% on 7/31/2010)

1. **Remote Labs** went into production with the start of the fall semester. Usage continues to increase as more students and faculty discover this resource. The School of Computing and Engineering, who piloted this initiative last spring, are the most frequent users of this service although students from all of the academic units are now regularly using Remote Labs. Several new and updated applications were requested from academic units this past semester and these are now available to the appropriate security groups. In addition, a customized File Manager application was developed last fall and it provides a user-friendly interface for moving and copying files.

- **Total number of Remote Lab logins per month**

<table>
<thead>
<tr>
<th>Month</th>
<th>Logins</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2010</td>
<td>1206</td>
</tr>
<tr>
<td>November 2010</td>
<td>1866</td>
</tr>
<tr>
<td>October 2010</td>
<td>2369</td>
</tr>
<tr>
<td>September 2010</td>
<td>2192</td>
</tr>
<tr>
<td>August 2010</td>
<td>729</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>9848</strong></td>
</tr>
</tbody>
</table>
Top 10 Applications in Remote Labs

<table>
<thead>
<tr>
<th>Title</th>
<th>Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Visual C++ 2010 Express</td>
<td>580</td>
</tr>
<tr>
<td>SPSS Statistics 18</td>
<td>364</td>
</tr>
<tr>
<td>MatLab R2010a</td>
<td>232</td>
</tr>
<tr>
<td>Adobe Acrobat 9 Pro</td>
<td>121</td>
</tr>
<tr>
<td>Adobe Photoshop CS5</td>
<td>115</td>
</tr>
<tr>
<td>Microsoft Visual Studio 2008</td>
<td>107</td>
</tr>
<tr>
<td>MatLab R2009b (SCE)</td>
<td>105</td>
</tr>
<tr>
<td>Windows Explorer</td>
<td>98</td>
</tr>
<tr>
<td>Remote Labs File Manager</td>
<td>77</td>
</tr>
<tr>
<td>LabVIEW 2010</td>
<td>66</td>
</tr>
</tbody>
</table>

- The University Center student computer lab was retrofitted to become a new computer testing center. Several new security features were added to the facility including a “lockdown” image and new privacy screens on all UC lab computers. It is now open and available for use.
- IS partnered with Miller Nichols Library to create a new and expanded student computing lab in on the second floor of the remodeled facility (see photo). The spacious new computing lab was installed with brand new Dell computers and peripherals. It opened in January of 2011.
- A u-wide committee comprised of helpdesk management is currently working to identify a new solution for ticket tracking, incident management, etc. Primary goals are to have a new system in place to support u-wide shared services. Additional goals include reducing costs, and finding a more feature-rich product out of the box. A new solution should be in place by fall 2011.
- Thin client technology is being piloted on campus this semester. Desktop Support built a secure and redundant backend infrastructure to support VMware View desktop clients. Wyse ThinOS thin clients were evaluated in conjunction with VMware View in select kiosk configurations as part of the Thin Computing Pilot. A new customer feedback survey was developed so that users could comment on their experience.
Support Services – Customer Requests

Over the last five years, the customer support volume has steadily increased. When comparing the periods of August – December 2009, and August – December 2010, there is a 1.48% reduction in support tickets this year as compared to last:

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3084</td>
<td>2447</td>
<td>2670</td>
<td>2800</td>
<td>3660</td>
</tr>
<tr>
<td>February</td>
<td>1886</td>
<td>1595</td>
<td>1712</td>
<td>2118</td>
<td>3330</td>
</tr>
<tr>
<td>March</td>
<td>1710</td>
<td>1609</td>
<td>1763</td>
<td>2145</td>
<td>2812</td>
</tr>
<tr>
<td>April</td>
<td>1670</td>
<td>1923</td>
<td>1960</td>
<td>2402</td>
<td>2724</td>
</tr>
<tr>
<td>May</td>
<td>1761</td>
<td>2300</td>
<td>1880</td>
<td>2264</td>
<td>2362</td>
</tr>
<tr>
<td>June</td>
<td>2095</td>
<td>2044</td>
<td>2382</td>
<td>2634</td>
<td>2691</td>
</tr>
<tr>
<td>July</td>
<td>1860</td>
<td>2125</td>
<td>2540</td>
<td>2796</td>
<td>2807</td>
</tr>
<tr>
<td>August</td>
<td>3802</td>
<td>3673</td>
<td>4010</td>
<td>3654</td>
<td>3977</td>
</tr>
<tr>
<td>September</td>
<td>2015</td>
<td>1632</td>
<td>2414</td>
<td>2586</td>
<td>2904</td>
</tr>
<tr>
<td>October</td>
<td>1741</td>
<td>1703</td>
<td>2183</td>
<td>2115</td>
<td>2311</td>
</tr>
<tr>
<td>November</td>
<td>1306</td>
<td>1306</td>
<td>1658</td>
<td>2771</td>
<td>2232</td>
</tr>
<tr>
<td>December</td>
<td>1257</td>
<td>1364</td>
<td>1806</td>
<td>2386</td>
<td>1888</td>
</tr>
</tbody>
</table>

This slight reduction at the end of the year may be attributed to:

- Implementation of a new password change tool and expiration notification system
- Increased familiarity with Outlook Live student e-mail system
Support Services - Customer Satisfaction

As a service provider, customer feedback remains very important to us. The feedback mechanisms we have in place indicate customers overall are very satisfied with the support they are receiving. The following chart represents Support Services’ customer satisfaction data for the period of August 2010 through December 2010. Survey data is primarily related to helpdesk and desktop support areas, but it also represents feedback from the technology acquisition and lab management services.

Call Center (Computer Helpdesk)

- The Call Center responded to 14,499 support requests, resolving 11,588 requests and escalating 2,911 requests. This number includes 2,374 e-mail requests, 1,187 of which did not get entered into the Remedy ticketing system.
- The Call Center’s first-call resolution rate was 80%.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Call Center Support Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 &amp; Q2 2008</td>
<td>10644</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2008</td>
<td>13673</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2009</td>
<td>12810</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2009</td>
<td>16564</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2010</td>
<td>16091</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2010</td>
<td>14499</td>
</tr>
</tbody>
</table>
The last few years have seen a relatively steady increase in support requests generated through our online problem report tool. This tool allows users to submit requests 24 hours a day, 7 days a week.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Web Submission Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 &amp; Q4 2008</td>
<td>783</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2009</td>
<td>677</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2009</td>
<td>920</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2010</td>
<td>671</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2010</td>
<td>600</td>
</tr>
</tbody>
</table>

**Other Call Center Projects**
- Worked closely with UM E-mail and UMKC Central Systems teams to develop procedures and documentation related to the Exchange 2007 upgrade
- Participated in New Student Orientations in conjunction with the Admissions Office
- Continued to work with Admissions, Registration and Records and Financial Aid to review and modify student SSO and e-mail account creation and notification procedures
- Continued to maintain and support Remedy Action Request System for tracking support requests
- Hired and trained a new Call Center technician.

**Desktop Support**
- Responded to and resolved 2183 routine desktop support requests:

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Ticket Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>643</td>
</tr>
<tr>
<td>GRA/WorkStudy</td>
<td>116</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td>Staff</td>
<td>1169</td>
</tr>
<tr>
<td>Student</td>
<td>243</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2183</strong></td>
</tr>
</tbody>
</table>

- Provided maintenance support, ongoing improvements and functionality upgrades to UMKC Remote Labs, offering over 60 remote applications to 8359 user sessions
- Updated IS-Support Services server infrastructure to use multipath iSCSI connections to SAN on both VMware and Hyper-V host clusters
- Worked with Student Health & Wellness to re-engineer patient Exam Rooms for expanded capabilities
- Worked with Intercollegiate Athletics to enable XOS Thunder for video review and editing
- Provided IT and engineering support for multiple KCUR remote broadcasts from around Kansas and Missouri
- Worked on major re-design of UMKC IS/IA website
- Participated in evaluation process resulting in planned transition from eInstruction to Turning Point for in-classroom electronic feedback system
- Built second “secure” system for Psychology incorporating whole disk encryption with Microsoft BitLocker for highly-sensitive health data research
- Provided emergency end-of-life and transitional support to School of Computing and Engineering file, print and license servers
- Implemented policy-based scripted approach to System Center Configuration Manager client installation, increasing its reach to 5000 on-campus computers
- Evaluated new "tiny" desktop model from Dell for specialized kiosk models in Registration & Records
- Expanded Athletics computer lab to house 20 systems; upgraded to Windows 7
- Updated internal documentation, including ProSeries, NetBotz Console, PaperCut, SCCM Imaging Service, GARS and AICPA
- Worked with the University Library regarding the merger of IS & UL lab images
- Implemented Titanium Web Entry front end on intake kiosks in Counseling, Health and Testing Center
- Upgraded PaperCut MF to 10.7; Created new OneCard Transfers, executive summary reports and rewrote OneCard Transfers by Printer report to allow integration with other OneCard reports
- Created many functionality upgrades to monitor servers and systems, including the ability to inspect Windows Installer Module state, track IS lab usage, measure SCCM client growth, and monitor more systems with greater variety of job types and communication lines depending on preference of system stakeholder
- Started using VeriSign certificate to sign remote desktop connection files used in UMKC Remote Labs
- Worked to quickly identify and aggressively patch Adobe Reader and Acrobat systems as vulnerabilities were uncovered
- Created three new online forms for Account revocation and software license purchases
- Built, deployed and supported a dozen new Scala systems around campus to begin moving toward standardization of UMKC display systems
- Built and implemented Macintosh OS X Terminal Server and provided support for iPhone programming on the platform
- Assisted with IT aspects of staff migrations from University center to the Student Union
- Assisted with printer re-configurations for migration of IP resources from external addresses to the internal network
- Provided support for transition of devices requiring non-authenticated SMTP support during migration and relocation of Exchange infrastructure
- Worked with information Access staff to provide cross-training in desktop support at Hospital Hill campus
- Reworked select IS policies and published to IS Policy and procedures website
- Worked to become an authorized eProcurement, ProCard and Apple purchasing agent for UMKC
- Created over 75 application deployment packages (see Appendix for list)
- Mentoried, assisted, built solutions for and provided backstop support to IT Liaisons on a daily basis
- Provided IT support for special events, including UM President’s Town Hall, the UM Curator’s Meeting and several New Student Orientations
- Created, updated and managed OS images and OSD task sequences for the following:
  - Special kiosk images for Student Health and Wellness, International Student Affairs, Registrar’s Office and Human Resources
  - Special lab images for BSM, EMAS, Physics, Northland Campus and Athletics
  - Windows 7 for universal use (32-bit and 64-bit)
  - Windows 7 for IS Labs
- Provided workstation and network support for UMKC students living on campus
  - Updated Workstation Replacement Program ordering website
  - Print Queue Migration – Completed migrating queues to kc-print2 for a few users the automated process did not touch (usually due to prolonged computer outages).
  - Mac Image Development
  - Updated OS X disk images for latest Apple hardware, including the recent revision of the MacBook Air. We also developed faster methods for imaging this model, which will serve us
well later as Apple moves toward eliminating both optical drives and mechanical hard drives in all its portables.

- Created and deployed custom Mac disk image to University Communications. Initial test phase in December was successful and full-scale deployment occurred in late January.

- Math EXPO Support – Facilitated guest ILE access and support for Prof. Richard Delaware, site contact for this weekend conference in October. This is the second year in a row UMKC has hosted the event for math educators from area high schools and colleges, and it is likely it will be back here next Fall.

- GeoWorlds grant project – Assisted Prof. Molly Davies in procurement of 17 new laptops and an Apple Xserve for this Kauffman-funded grant partnership with local high schools.


- ESRI licensing – Replaced physical license server for AUPD with a more sustainable VM.

- Created new Tegrity report for Information Access.

- Improved SCCM services to include support for ILE rooms, EMAS lab and UL computer labs
  
  - Departmental Labs
    - Installed 19 new iMacs in English Composition lab in time for the Fall semester.
    - Upgraded the four major A&S Windows labs (GIS, Environmental Science, AUPD, and Urban Research) to Windows 7, with no major software conflicts.
    - Applied Adobe CS5 upgrade in FA graphic design lab.

- School of Computing and Engineering (SCE)
  
  - Cleaned and rebuilt School of Computing & Engineering student computing labs from scratch, implementing hundreds of packages in both physical and Remote Labs contexts
  
  - Coordinated Linux VM creation and physical server decommissions with faculty and Central Systems. On track toward goal of having all servers virtualized or otherwise moved out of Flarsheim Hall by summer, 2011.
  
  - Processed large back-inventory of surplus equipment: Over 200 legacy PCs, 100 CRT monitors, and 30 laser printers. Over 100 CRTs still in use were replaced by spare LCD monitors to reduce power consumption and lower replacement costs.
  
  - Assisted with imaging and installing computers for weekend program competition in October.
  
  - Setup new license server, kc-iss-iss-03, with OPNET.
  
  - Imaged all SCE labs to Windows 7; configured KeyServer with all the new SCE software
  
  - Addressed numerous printing issues in SCE labs by negotiating four new, replacement printers from Dell. Setup two new Dell 5230dn printers in FH 460 & FH 462. Setup two old Dell 5200dn printers in FH 464 & FH 364. Enabled load balancing printing on all systems.
  
  - Configured two SCE labs to be used in the ACM programming competition
  
  - Migrated all license managers off of kc-sce-main (moved to virtual servers)
  
  - Modified Lab Reporting Services to include SCE and gathered usage stats for the SCE labs

Seventeen legacy servers and surplus equipment (mentioned above) that filled the SCE server room at the start of the Fall semester have been decommissioned and removed for surplus.
Lab Management Office

- Maintained operations in eight IS-managed general use student computer labs, twelve restricted access labs, and supplied two associated classroom/testing facilities. 10,674 people used these sites during this time:

<table>
<thead>
<tr>
<th>Lab Name</th>
<th>Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloch School of Business 110</td>
<td>2,137</td>
</tr>
<tr>
<td>Health Sciences 3304</td>
<td>1,253</td>
</tr>
<tr>
<td>Johnson Residence Hall</td>
<td>453</td>
</tr>
<tr>
<td>Miller Nichols 3rd Floor</td>
<td>3,095</td>
</tr>
<tr>
<td>Oak Place Labs</td>
<td>701</td>
</tr>
<tr>
<td>Royall Hall 303, 304, and 314</td>
<td>5,027</td>
</tr>
<tr>
<td>School of Computing and Engineering 364</td>
<td>681</td>
</tr>
<tr>
<td>School of Computing and Engineering 460</td>
<td>962</td>
</tr>
<tr>
<td>School of Computing and Engineering 462</td>
<td>967</td>
</tr>
<tr>
<td>School of Computing and Engineering 463</td>
<td>624</td>
</tr>
<tr>
<td>School of Computing and Engineering 464</td>
<td>1,161</td>
</tr>
<tr>
<td>School of Education 129</td>
<td>2,915</td>
</tr>
<tr>
<td>Student Union 210</td>
<td>3,121</td>
</tr>
<tr>
<td>University Center B17</td>
<td>149</td>
</tr>
</tbody>
</table>

- Continued to collaborate with various schools and departments to ensure student computing needs are met.
- Staffed Miller Nichols Library computer lab for extended hours for Fall semester finals.
- Staffed Student Union computer lab for extended hours for Fall semester finals.
- Staffed School of Computing and Engineering labs for extended hours for Fall semester midterms and finals.
- Staffed registration sessions during one new student orientation.
- Scheduled 8 classes in Royall Hall/Health Sciences Building computer labs.
- Received over 110 applications for Student Assistant positions, interviewed 130 prospective new hires, and hired 42 new Student Assistants for IS-managed labs. Conducted 12 new hire orientations.
- Processed over 6,824 shifts and supervised over 18,712 Student Assistant man-hours. Completed reviews for 64 Student Assistants.
- Supported student printing needs by keeping supplies on hand and printers ready for use. Over 366,000 print jobs were printed in IS-managed general student use computer labs, totaling over 1,987,000 pages.
Hardware and Software Acquisitions

- Purchased over $522,000 worth of hardware equipment, parts and peripherals.
  - eProcurement: $419,274.25
  - Procard: $103,155.81

- Of the eProcurement vendors, the overwhelming number of purchases was with Dell
Of the 19 Procard vendors, the largest number of purchases was with Apple, at $78,214.80.
There was $12,872.36 in Dell purchases. These were prior to the implementation of the process that now puts Dell quotes on the eProcurement Premier page.
GovConnection was the third most-used vendor, with purchases of $2,568.65.
The other 16 vendors represent, for the most part, one-time or non-recurring purchases. Five vendors received orders totaling between $1,000-$1,600 each. Another 11 vendors each received orders of $840 or less.

Orders and purchasing activities
- Approved 84 departmental requisitions during the period
- Returned numerous orders, a process that includes contacting the vendor, getting an RMA number, getting return labels or creating return labels, packaging the item(s) to be returned, and delivering the package(s) to a FedEx or UPS store.
- The ordering process also involves activities outside of the actual purchases and requests for quotes or computer/printer purchasing information. Here are some examples:
  - Notifying departments about errors in the MoCodes provided for purchases. This usually entails the department building a budget for the items in PeopleSoft
  - Working with eProcurement-Columbia and the vendor to straighten out returned items
  - Working with vendors to fix lost orders, delays or an incorrect P.O.
  - Sending copies of invoices or lists of PC/printer serial numbers to departments, Support Services staff or liaisons
  - Providing information on stolen equipment

- There were a number of meetings held with various vendors during the period.
- Another successful Workstation Replacement Program took place in January, when 650+ Dell desktop and laptop computers and Apple iMac and MacBook laptops were ordered and delivered. Support Services provided numerous services for this effort including planning, budgeting, eligibility review, ordering, purchasing, logistical, delivery and imaging.
Software Acquisition

- Placed software orders for various departments on ProCard ($117,884.96)
- Placed major software orders and renewals through eProcurement ($271,465.11)
- Renewed shared system contracts ($29,212.06)

![Graph showing software acquisition costs by ProCard and ePro for August 2010 - January 2011]

- Renewed licenses for Bomgar, Cadence, ERDAS, KeyServer, Learning Objects Campus Pack, Second Life Kangaroo Island
- Obtained approval to serve out Abaqus, Argus, Aspen, ChemOffice, LabView, MathCAD, Matlab, PowerWorld, SketchUp, SynaptiCAD in Remote Labs

![Pie chart showing purchases by vendor]

- Provided user community with access to reduced pricing for personal copies of Microsoft Office 2011 for Mac through the Home Use Program
- Increased student counts used by KeyServer (software monitoring software)
- Worked with system campuses to increase efficiency through shared services
Additional Support Services initiatives

- Training and development remains a high priority in Information Services. During the past review period, team members completed various training courses including: Human Resources leadership training, Windows 7, Windows Server 2008 R2, Dell certifications, Microsoft certifications, Apple certifications, Human Resources Supervisory training, FERPA training, etc.
- During the past months, numerous IT Liaison meetings were led and organized by Support Services. Arrangements were made for relevant guest speakers and numerous IT projects and updates were presented by the team.
- IS continues to partner with academic units and others to write service level agreements for technology support. During this past six months IS re-negotiated the Toy and Miniature Museum contract.
- Served on various committees during this period including the UM Standards Committee, Volume Purchase Agreement committee, Pathway Leads committee, Sustainability committee and actively worked on various initiatives. We continue to represent UMKC and work with u-wide committees to ensure vendor contracts are current and performance is aligned with campus expectations.
- Served as the university-wide single point of contact for the Dell reimbursement program.
- Participated in university-wide initiative to identify a strategic vendor for document management during this period.
Appendix

- List of 79 application packages created by Desktop Support for deployment over the past five months:

  ACT AIM 2.2 - 2010.10.25
  Adobe Acrobat 9 (Latest Version)
  Adobe Acrobat 9.3.4 Update - 2010.08.23
  Adobe Acrobat 9.4.0 Update - 2010.10.08
  Adobe Acrobat X (Latest Version)
  Adobe Flash Player 10,1,53,64 - 2010.06.18
  Adobe Flash Player 10,1,82,76 - 2010.08.23
  Adobe Photoshop CS5 64 - 2010.06.02
  Adobe Reader 9.3.4 - 2010.08.23
  Adobe Reader 9.4.0 - 2010.10.08
  Advance 9.3 - 2009.09.24
  Advance 9.5 - 2010.10.12
  Amos 19 - 2010.10.22
  Bomgar Client - 2010.04.01
  Cisco Click-to-Call 8.0.2540 - 2010.08.27
  Costworks 2011 - 2010.12.10
  CPS 6.58.0001 - 2010.08.20
  EndNote X4 - 2010.08.10
  Google Chrome - 2010.08.06
  Haskell Platform 2010.2.0.0 - 2010.08.03
  ICF Adobe Web Players - 2010.09.09
  ICF Adobe Web Players - 2010.10.25
  ICF Adobe Web Players - 2010.12.27
  ICF Gleim CPA 2011 - 2010.11.23
  ICF Markstrat Team 5.1.0.4 - 2010.09.01
  ICF Markstrat Team 5.1.0.5 - 2010.11.09
  ICF Mathcad 15.0 - 2010.09.21
  ICF Origin 8 SR6 - 2010.09.21
  ICF Quicktime 7.6.7 - 2010.09.09
  ICF Quicktime 7.6.9 - 2010.12.27
  ICF Real Alternative 2.0.2 - 2010.04.26
  ICF Rebuild WMI - 2010.10.13
  ICF Respondus Campus Wide 4.0 - 2010.08.04
  ICF Respondus LockDown Browser - 2010.11.18
  ICF ZoomText 9.18.7 - 2010.03.30
  InfraStruXure - 2010.11.10
  Microsoft Windows SDK 7.0 - 2010.08.26
  Microsoft WSE 3.0 Runtime - 200.08.23
  Minitab 16 - 2010.09.20
  Mozilla Firefox 3.6.11 - 2010.10.25
  Mozilla Firefox 3.6.13 - 2010.12.27
  Mozilla Firefox 3.6.8 - 2010.08.04
  Mozilla Firefox 3.6.9 - 2010.09.09
  SAS 9.2 M2 - 2010.08.17
  SAS 9.2 M3 64bit Remote App - 2010.09.30
  SCE - Abaqus 6.10 - 2010.08.05
  SCE - Alice 2.0 - 2010.08.16
  SCE - Alice 2.2 - 2010.08.16
  SCE - ASPEN 11.6 - 2010.08.27
  SCE - BlueJ 3.0.1 - 2010.07.23
  SCE - CS5590SS Fedora VM - 2010.08.20
  SCE - FEKO - 2010.04.28
  SCE - FreeGLUT 2.6.0-3 - 2010.12.21
  SCE - HTML-Kit 292 - 2010.07.28
  SCE - LabView 2010 - 2010.08.06
  SCE - Lua 5.1.4-40 - 2010.12.20
  SCE - MicroStation - 2010.05.05
  SCE - Migrate kc-sce-main - 2010.11.16
  SCE - MSSQL Server Express 2008 R2 - 2010.08.03
  SCE - NetBeans 6.8 - 2010.03.23
  SCE - Oracle SQL Developer 2.1.1 - 2010.08.03
  SCE - Petite Chez Scheme 8.1 - 2010.12.20
  SCE - PowerWorld Simulator 15 GSO - 2010.10.07
  SCE - PSCAD 4.0
  SCE - SAP2000 - 2010.05.06
  SCE - SolidWorks 2010 SP4.0 x32 - 2010.07.28
  SCE - SolidWorks 2010 x32 - 2010.07.28
  SCE - Strawberry Perl 5.12.1.0
  SCE - SynaptiCAD 15.04c - 2010.08.04
  SCE - SynaptiCAD 15.14b - 2010.11.05
  SCE - VMPlayer 3.1.1 - 2010.08.16
  SCE - SmartBoard 10 - 2010.08.13
  SCE - VMStation 1.1.0 - 2010.08.30
  SOE - Microsoft System Center Service Manager
  VMware ESX
  VMware View 4.0
  Wyse C10LE thin clients

Evaluated following products for compatibility and performance:

- Apple iOS 4
- Google Droid 2.2
- Macintosh OS X Terminal Server iRAPP
- Microsoft Office 2011 for Macintosh
IS PROJECT - Expand Wireless Systems (Goals 1, 2, 3)

With 377 wireless access points installed campus wide we are now expanding wireless coverage in campus buildings to cover classrooms, offices and other usable spaces. In most buildings this would be 80% to 90% of the floor space allowing for seamless network access as you move throughout a building. We are also upgrading access points to the 802.11n standard. See the appendix for current buildings with wireless coverage.

Critical Issues

- The new wireless standard 802.11N, was just approved in September of 2009, will require replacing every access point on campus with a new unit. New units may be more costly, especially when they first hit the market.
- The new 802.11N antennas take additional inline power so a new IEEE 802.3 inline power standard is out as well. This will require replacing at least some blades in network switches with new blades that support the new power standard. This process was completed over the last year months.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

IS Goals Supported:

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.
Project Completion & Timeline

5 Year Plan

Completed
Projected Completion

Wireless Network Phase I

Wireless Network Phase II

Wireless Network Phase III

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Jan-Jun 2005
Jul-Dec 2005
Jan-Jun 2006
Jul-Dec 2006
Jan-Jun 2007
Jul-Dec 2007
Jan-Jun 2008
Jul-Dec 2008
Jan-Jun 2009
Jul-Dec 2009
Jan-Jun 2010
Jul-Dec 2010
Jan-Jun 2011
Jul-Dec 2011
Jan-Jun 2012
Jul-Dec 2012
Jan-Jun 2013
IS PROJECT - INFRASTRUCTURE IMPROVEMENT
Upgrade Building Wiring Infrastructure (Goals 1, 3)

We have completed infrastructure upgrades in the Bloch School of Business, Health Sciences building, Union Station, Biological Sciences, Spencer Chemistry, Fine Arts, School of Education, Durwood Soccer Stadium, Johnson Hall, Pershing Place Bld., Student Union, Law School and are currently working on the Medical School & Miller Nichols Library. We hope to complete the Library upgrade to Category 6 cable in next few months and then continue in the Medical School. See Appendix for status chart by building.

Critical Issues
- New cable standards like Category 7 that will support 10 gigabit connections are projected to be out in 2011. New standards have increased the cable size and made cable stiffer. These new cables require larger conduit sizes and longer installation times, which increase cost.
- Copper cable prices have more than doubled in the last 5 years driving up the cost of many of the supplies we use on a daily basis. If this inflation rate continues cost of materials could cause us to slow or stop some installations due to insufficient budget.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

IS Goals Supported:
- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.

Project Completion & Timeline
5 Year Plan

Previous
Jan-Jun 2005
Jul-Dec 2005
Jan-Jun 2006
Jul-Dec 2006
Jan-Jun 2007
Jul-Dec 2007
Jan-Jun 2008
Jul-Dec 2008
Jan-Jun 2009
Jul-Dec 2009
Jan-Jun 2010
Jul-Dec 2010
Jan-Jun 2011
Jul-Dec 2011
Jan-Jun 2012
Jul-Dec 2012
Jan-Jun 2013
Jul-Dec 2013
Jan-Jun 2014
Jul-Dec 2014

Completed
Projected Completion
IS PROJECT - VoIP Roll Out (Goals 1, 2, 3)

We started rolling out voice over IP phones first to all of Information Services and then in the new Health Sciences building. We have now replaced phones in Manheim, Royall, Haag, Flarsheim, Fine Arts, Old Maintenance, Nursing School, Spencer Chemistry, Biological Sciences, Dental School, Oak Place, Oak Street, Johnson Hall, Administrative Center, Law School, Student Union and are working on the Swinney Recreation Center and University Center. Each person who currently has a campus phone will receive a new IP phone similar in functionality at no charge to the department. See 
http://www.umkc.edu/is/nt/umkc-phone.asp for more information on phones. See Appendix for buildings with VoIP phones deployed.

Critical Issues

- This project is dependent on both the campus network and each buildings cable plant infrastructure. IP phones require inline power for greatest functionality which requires a Category 5 or higher cable plant. This project would slow if the campus infrastructure project is delayed.
- The campus PBX is 25 years old and a catastrophic failure would require an immediate cutover to IP phones.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

IS Goals Supported:

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.

Project Completion & Timeline

5 Year Plan

Completed  Projected Completion

**Network Core and Building Electronics Lifecycle (Goals 1, 2, 3)**

UMKCnet has over 300 routers, switches and other electronic devices that make it functional. These systems are replaced on a 5 to 6 year lifecycle plan to keep the network reliable, robust and maintainable with current hardware and software contracts. See Appendix for building by building electronics lifecycle status.

**Critical Issues**

- The campus keeps growing and expanding without adding additional resources to support the voice and data networks. Just in the last few years 8 new buildings have been built and 3 other additional locations added to the network. During that same period the Networking & Telecommunications budget has been cut.
- Network equipment connectivity is dependent on the campus fiber optic cable plant. This plant is aging and some of the older fiber may have to be replaced to support newer speeds like 10 Gigabit Ethernet.
- VoIP systems are dependent on the campus network and infrastructure for reliable operation. If funding is insufficient to keep UMKCnet equipment current both voice and data systems could fail.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

**IS Goals Supported:**

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.

---

**Age of Network Electronics**

![Pie chart showing the age distribution of network electronics]

- 0-1 Years: 0.6%
- 1-2 Years: 1.3%
- 2-3 Years: 17.6%
- 3-4 Years: 39.0%
- 4-5 Years: 23.6%
- 5-6 Years: 17.9%
Network new buildings (Goals 1, 3)

UMKC is currently building a new Oak Street Parking Garage with office space, expanding the Miller Nichols Library with additional classroom space and remodeling the University Center. These projects require extensive planning, engineering and staff time both before and during the buildings construction. Bringing voice and data systems online when a building is completed requires the efforts of the entire Networking & Telecommunications staff.

Critical Issues

- Additional buildings with additional voice and data equipment put a greater demand on campus resources. Specific to Information Services, network usage both wired and wireless, the load on the Internet connections which cost hard dollars to increase, Call Center support, trouble tickets and onsite visits to repair and trouble shoot issues, network security, etc. These projects include cost for cable plant and electronics but no additional resources for staff or ongoing maintenance of infrastructure.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. Building projects could not make deadlines for building openings with staff cuts or vacant staff positions for extended periods of time.

IS Goals Supported:

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.

Shared Services - Network Architecture Engagement (Goals 1, 2, 3)

UMKC is actively participating in the system-wide Shared Services Initiative. This initiative includes projects that span multiple campuses designed to cut costs, share resources and even staff when possible. Specific to IS-Infrastructure Services is the Network Architecture Engagement Project. The goal of this project is to enhance the Universities intercampus data network in support of shared services. Cisco has agreed to provide free consulting services in support of this project. A Network Architecture Engagement Committee has been formed with representatives from each campus, the Hospital and MOREnet to work with Cisco to move this project forward. To date, the committee has met several times and collected data on each campuses network infrastructure, architecture and setup.

Critical Issues

- Trying to get agreement across all groups on objectives and outcomes of the committee.
- Funds and staffing to implement the committee’s recommendations

IS Goals Supported:

- Physical 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.
- Effectively and efficiently manage resources.
Appendix

Individual Infrastructure Services accomplishments this period:

- New Student Union brought online with voice and data networks, 10 gigabit building uplink.
- Reviewed Technology Development program student consulting proposal.
- Internet link speed increased from 250M to 280M.
- Networking & Telecommunication staff attend over 220 hours of training during this reporting period.
- Upgraded the operating systems on over 300 network devices with the latest security patches and updates.
- Staff member served as the campus building liaison representative.
- Completed over 350 moves, adds and changes on the voice and data networks.
- Responded to, solved and closed 890 trouble tickets recoded in Remedy.
- Installed 210 Voice over IP phones.
- Virtualized over 70 servers.
- Two Staff members served on the ICN committee.
- Processed over 3 million calls through voice systems.
- Staff member served on the campus recycle program committee.
- Upgraded the operating system on all wireless access points (377) with the latest patches and updates.
- Upgrade Lenel security server software.
- Staff member served on the U-wide Network Architecture committee.
- Marked University buried cable plant locations as required by law for Missouri One Call over 446 times during this reporting period.
- Wireless Access Points were added to the Student Union and School of Dentistry.
- 10 Gigabit uplink added to the remodeled Katz building.
## UMKC WIRELESS INVENTORY

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Count</th>
<th>Average Monthly Cost</th>
<th>Average Cost per Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>115</td>
<td>$9,751.00</td>
<td>$84.79</td>
</tr>
<tr>
<td>Sprint</td>
<td>153</td>
<td>$9,420.00</td>
<td>$61.57</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>69</td>
<td>$4,420.00</td>
<td>$64.06</td>
</tr>
<tr>
<td>Verizon</td>
<td>42</td>
<td>$2,351.00</td>
<td>$55.98</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>379</strong></td>
<td><strong>$25,942.00</strong></td>
<td><strong>$68.45</strong></td>
</tr>
</tbody>
</table>

**Percentage of Total Inventory:**
- Sprint: 45%
- T-Mobile: 18%
- Verizon: 11%
- AT&T: 30%
Efforts of the Information Access Division during the period February through July 2010 were notable for the improvements made in measurements of customer response times, despite a steady increase in requests for service. All divisions had singular and combined successes.

**Instructional Technologies (ITS)** Upward trends in online related programs such as Tegrity and Wimba continue to occur. Significant Blackboard upgrades made to improve service in December 2010.

**Information Manipulation Services (IMS)** spent resources and time on large projects for a number of colleges and schools. Revamping processes for campus distribution groups, email, mass communications, and account management.

**Information Presentation Services (IPS)** continued to create a high quality web development UMKC. Started on four new ecommerce projects.

Information Access played a key role videotaping and producing many campus wide UMKC events. IA continues to play a key role in defining and developing distance education solutions for the campus.
ITS Highlights
Projects, Research and Development, and Personnel

UMKC Cable Network
- Continue work with Penn Valley Community College to provide Kansas City with educational classes and programming
- Archive TV programs to store for rebroadcast
- Seek out new sources of programming
- Stated program to establish relationships with producers
- Schedule TV programs to be broadcast
- Efficiently find solutions to cable related problems
- Increased number of programs significantly
- Provide the public with an online and real-time cable schedule

Interactive Video Group
- Interactive Video’s primary responsibilities during this period were to support ITV distance learning events and support video conference meetings. Here is the hourly breakdown of the events we supported February through July:
  - ITV distance learning: 1176.2
  - Staffed video conference meetings: 189.37
  - Non-staffed video conference meetings: 84.25
  - Pre-recorded distance learning lectures: 18.65
  - Academic Enhancement video productions: 55
- Identified and worked with Central Systems to correct QoS issue related to streaming video
- Relocated AMX touch panels in control rooms to improve response time
- Installed unused XGA monitors dedicated to Polycom systems, eliminating need to switch away from switcher preview screens
- Coordinated, tested and identified the advantage investing in high definition Polycoms would provide
- Completed lab demonstration video for Dr. Cydney McQueen in August.
- Shot B-Roll footage for MNL library robot project. Project has been postponed for April.

Miscellaneous IA News

Tegrity
- Planning for fourth year of Tegrity
- Negotiated a multi-year campus-wide Tegrity license in conjunction with UMC
- Coordinated the conversion of the old Tegrity server into a Virtual Appliance with larger drive space
- Coordinated the setup of a test appliance
- Made Tegrity available by default for all courses in Spring 2011
- Upgraded to new version of Tegrity, December 2010

ePortfolios:
- Planning for fourth year of ePortfolios
- Continued successful usage by the History and Dental Hygiene departments
- 132 active Dental Hygiene accounts
- 120 active History accounts
- Additional accounts being added in January 2011
**eCalendar:**
- Second year administering the UMKC eCalendar
- Implemented a new website for the UMKC calendar to act as a one stop shop for event submission, calendar requests etc.
- Currently support over 60 calendars that feed into the main UMKC calendar
- Closing in on 100,000 view per month

**Media Outreach:**
- Continued administration of UMKC’s YouTube channel
- Advised and assisted departments in promoting their videos via the YouTube Channel
- UMKC is currently among the top 30 most subscribed-to EDU channels on YouTube

**Web and Application Development:**
- Successfully implemented and submitted an iPhone app to the Apple Store – Free app is now available for download
- Working on additional iPhone apps
- Researching Android Development

**Miscellaneous**
- Active Directory Distribution Lists and Security groups where continued to be migrated from being refreshed from the legacy Visual Basis process. These groups are now refreshed by VBScripts that are invoked by scheduled tasks.
- Student Admission letters have been made available by web PDFs for both daily and historical printing. Working with admissions to replace SSO letter in conjunction with admission letter.
- Supporting promotion and tenure committees with SharePoint.
- Created new web sites for WordPress Support ([http://www.umkc.edu/ia/wordpress/](http://www.umkc.edu/ia/wordpress/))
- Created new mechanism for managing videos online ([http://www.umkc.edu/ia/streaming/](http://www.umkc.edu/ia/streaming/))

**Academic Enhancement**
The group has started, completed and continued work on many projects of differing sizes. The projects support faculty, students and staff throughout the university.

- Bloch School lecture series Event Coverage (multiple events)
- Division of Diversity, Access & Equity (multiple events)
- Teach & Learning Online Classroom w/Lee Graham (multiple events)
- Power point conversions to Flash for instructors
- Black Women’s Leadership Conference Event Coverage (multiple events)
- Steve Harvey Morning Show Event Coverage
- Bloch School EOY
- General Education Streaming (multiple events)
- Alumni Awards
- Staff and Faculty Awards
- Applied Language Institute (In-progress)
- Online program and student video
Instructional Design
- The UMKC Instructional Design group has focused on offering training sessions in best practices related to online courses. ID works with individual departments to incorporate assessment, goals, and best practices to provide a sound structure for online learning. ID is also certifying online courses for quality under supervision from the Provost office. ID is offering certification of online instructors who have the opportunity to experience an online course from the perspective of a student while studying techniques to communicate effectively with this type of learner.
- Multiple online certification semesters were completed with over 20 instructors obtaining certification
- Offered 40 workshops for faculty
- 18 open labs offered for faculty
- Tens of courses certified by UMKC instructional design staff

Usage Data
Blackboard Stats
- Total ITS-related tickets closed during reporting period: 2201

<table>
<thead>
<tr>
<th>ITS-Related Tickets: Resolution by Department</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Systems</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Classroom Technologies</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Instructional technologies</td>
<td>2200</td>
<td>99.95%</td>
</tr>
<tr>
<td>Networking &amp; Telecom</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Support Services</td>
<td>1</td>
<td>.05%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2201</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

The sharp decrease in the number of tickets resolved by non-ITS departments reflects a change in ticket classification that was implemented with Support Services at the beginning of FS2010.

<table>
<thead>
<tr>
<th>Support Issues by User Role</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>1001</td>
<td>45.48%</td>
</tr>
<tr>
<td>GRA/Work-study</td>
<td>28</td>
<td>1.27%</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>0.64%</td>
</tr>
<tr>
<td>Staff</td>
<td>390</td>
<td>17.72%</td>
</tr>
<tr>
<td>Student</td>
<td>768</td>
<td>34.89%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2201</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Issues by Origin</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct IST Contact</td>
<td>1689</td>
<td>76.74%</td>
</tr>
<tr>
<td>Support Services Contact</td>
<td>361</td>
<td>16.40%</td>
</tr>
<tr>
<td>Web Form Submission</td>
<td>151</td>
<td>6.86%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2201</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
### Support Issues by Software

<table>
<thead>
<tr>
<th>Program</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard</td>
<td>2008</td>
<td>91.23%</td>
</tr>
<tr>
<td>Digital media support</td>
<td>22</td>
<td>1.00%</td>
</tr>
<tr>
<td>e-Instruction</td>
<td>3</td>
<td>0.14%</td>
</tr>
<tr>
<td>Listserv</td>
<td>60</td>
<td>2.73%</td>
</tr>
<tr>
<td>Moodle</td>
<td>12</td>
<td>0.55%</td>
</tr>
<tr>
<td>Respondus</td>
<td>5</td>
<td>0.23%</td>
</tr>
<tr>
<td>SharePoint</td>
<td>20</td>
<td>0.91%</td>
</tr>
<tr>
<td>Tegrity</td>
<td>13</td>
<td>0.59%</td>
</tr>
<tr>
<td>Turnitin</td>
<td>23</td>
<td>1.04%</td>
</tr>
<tr>
<td>Wimba</td>
<td>12</td>
<td>0.55%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>12</td>
<td>0.55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2201</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

### Support Issues by Academic Area (where specified)

<table>
<thead>
<tr>
<th>School</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>336</td>
<td>26.52%</td>
</tr>
<tr>
<td>Bloch School of Business</td>
<td>59</td>
<td>4.66%</td>
</tr>
<tr>
<td>Conservatory</td>
<td>36</td>
<td>2.84%</td>
</tr>
<tr>
<td>University Libraries</td>
<td>19</td>
<td>1.50%</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>35</td>
<td>2.76%</td>
</tr>
<tr>
<td>School of Computing &amp; Engineering</td>
<td>47</td>
<td>3.71%</td>
</tr>
<tr>
<td>School of Graduate Studies</td>
<td>7</td>
<td>0.55%</td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>105</td>
<td>8.29%</td>
</tr>
<tr>
<td>School of Education</td>
<td>92</td>
<td>7.26%</td>
</tr>
<tr>
<td>School of Law</td>
<td>7</td>
<td>0.55%</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>87</td>
<td>6.87%</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>130</td>
<td>10.26%</td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td>124</td>
<td>9.79%</td>
</tr>
<tr>
<td>Non-Academic Departments</td>
<td>183</td>
<td>14.44%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1267</strong></td>
<td><strong>100.00%</strong></td>
</tr>
<tr>
<td>WIMBA VOICE</td>
<td>02/10-7/10</td>
<td>08/10-12/10</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Presentations</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Board</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Podcaster</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Email</td>
<td>38</td>
<td>44</td>
</tr>
<tr>
<td>Announcements</td>
<td>74</td>
<td>92</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>140</strong></td>
<td><strong>189</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WIMBA CLASSROOM</th>
<th>PERIOD</th>
<th>Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08/10 - 12/10</td>
<td>663</td>
</tr>
<tr>
<td></td>
<td>02/10 - 07/10</td>
<td>1058</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td><strong>-59.58%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WIMBA PRONTO</th>
<th>PERIOD</th>
<th>Users</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08/10 - 12/10</td>
<td>1,051</td>
<td>19,663</td>
</tr>
<tr>
<td></td>
<td>02/10 - 07/10</td>
<td>806</td>
<td>11,973</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td><strong>23.31%</strong></td>
<td><strong>39.11%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EINSTRUCTION 08/10--12/10</th>
<th>INSTRUCTOR</th>
<th># Students</th>
<th># Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yoder</td>
<td>233</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Stoddard</td>
<td>94</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Marte</td>
<td>123</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lyon</td>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>King</td>
<td>618</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sherman</td>
<td>72</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lee</td>
<td>80</td>
<td>1</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>1,259</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EINSTRUCTION 08/10--12/10</th>
<th>PERIOD</th>
<th># Students</th>
<th># Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08/10 - 12/10</td>
<td>1,259</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>02/10 - 07/10</td>
<td>68</td>
<td>2</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td><strong>94.60%</strong></td>
<td><strong>75.00%</strong></td>
<td></td>
</tr>
</tbody>
</table>
### CAMPUS PACK

<table>
<thead>
<tr>
<th></th>
<th>02/10 - 07/10</th>
<th>08/10 - 12/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>4,537</td>
<td>6,435</td>
</tr>
<tr>
<td>Groups</td>
<td>232</td>
<td>505</td>
</tr>
<tr>
<td>Enrollments</td>
<td>7,834</td>
<td>13,097</td>
</tr>
<tr>
<td>Concurrent Sessions</td>
<td>45</td>
<td>67</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>12,648</strong></td>
<td><strong>20,104</strong></td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td></td>
<td><strong>37.09%</strong></td>
</tr>
</tbody>
</table>

### CAMPUS PACK TRENDS

<table>
<thead>
<tr>
<th></th>
<th>08/10 -</th>
<th>12/10 -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses</td>
<td>2,677</td>
<td>14,956</td>
</tr>
<tr>
<td>PLS</td>
<td>58</td>
<td>82</td>
</tr>
<tr>
<td>Communities</td>
<td>215</td>
<td>307</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>2,950</strong></td>
<td><strong>25,345</strong></td>
</tr>
<tr>
<td><strong>% Increase</strong></td>
<td></td>
<td><strong>92.31%</strong></td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td></td>
<td><strong>92.31%</strong></td>
</tr>
</tbody>
</table>

- Conducted an Ad Hoc committee to determine the best clicker system for UMKC
- Coordinated with CPS to have new eInstruction receivers installed
- Held 4 Wimba Workshops
- Provided one-on-one Wimba training for 3 Instructors
- Held 2 Campus Pack Seminars
- Obtained student refunds for CPS Registration
- Set up use of Wimba Classroom outside of Blackboard for IHD
- Began a Wimba Review with Instructor volunteers (ongoing)
- Coordinated Turning Technologies Training for 4 Pilot Instructors
- Updated user support documentation to reflect changes in upgrade to Campus Pack.

### IS Goals Supported

- User technologies and support that enhance and facilitate Teaching and Learning, Research, Service, and Economic Development.
- Continuous improvement in services, facilities, and professional development.

### LISTSERVER USAGE

<table>
<thead>
<tr>
<th>Term</th>
<th>Number of Lists</th>
<th>Number of Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS2006</td>
<td>637</td>
<td>120,420</td>
</tr>
<tr>
<td>FS2006</td>
<td>679</td>
<td>125,876</td>
</tr>
<tr>
<td>WS2007</td>
<td>643</td>
<td>125,895</td>
</tr>
<tr>
<td>FS2007</td>
<td>677</td>
<td>132,552</td>
</tr>
<tr>
<td>WS2008</td>
<td>712</td>
<td>139,405</td>
</tr>
<tr>
<td>FS2008</td>
<td>705</td>
<td>169,048</td>
</tr>
<tr>
<td>SP2009</td>
<td>759</td>
<td>158,949</td>
</tr>
<tr>
<td>SP2010</td>
<td>359</td>
<td>206,943</td>
</tr>
<tr>
<td>FS2010</td>
<td>375</td>
<td>194,008</td>
</tr>
</tbody>
</table>
Between August and the end of December 2010, we had almost 12,487 listserv postings resulting in 3.6 million emails to subscribers.

**Maestro**
- Active accounts: 15
- Tracking Events: 147,981
- Directly distributed Recipients: 414,322

**Moodle**
- Active course sites: 15

**SharePoint**
- UMKC has 251 sites running for faculty, staff and research purposes.
- Total unique users: 1794

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of new sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>52</td>
</tr>
<tr>
<td>2009</td>
<td>72</td>
</tr>
<tr>
<td>2010</td>
<td>126</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sites</strong></td>
<td><strong>251</strong></td>
</tr>
</tbody>
</table>

**Scanning**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>674</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>1</td>
</tr>
<tr>
<td>Course Evaluations</td>
<td>17,389</td>
</tr>
</tbody>
</table>

**Scanning performed for over 20 departments and schools**

- Weekly Exchange Account Management and SSO Form printing report information remains unchanged
**IMS Highlights**

- The administrative site for the MDC ecommerce Web application was moved into production.
- Created an Ecommerce application for the Women’s Council to accept payment only for new or renewal memberships.
- Created a web survey application for the Registrar’s Office.
- Created a grade change form application for the Registrar’s Office. The grade change form (PDF) resides in an Oracle table and is pulled from the table when the appropriate person authenticates to the application.
- Created an Ecommerce application for the School of Computing and Engineering for their MDM2010 conference. Also created an Administration site for SCE and Greg Hinrichs for transferring the monies.
- Refined and enhanced the CE application for dentistry. This application is used to print out certificates for attendees that completed the Midwest Dental Conference.
- Refined and enhanced an Ecommerce application for Bloch CE.
- Created an Ecommerce donation page for the School of Biological Sciences. This was requested by Marilyn Yoder.
- Started working on a Supplemental Application for Conservatory.
- Made an enhancement to the BBUR request system to allow users to add other users to organizational sites.
- Started working on a continuing education program for Nursing CE.
- For the MDC CE credit application, I added a web survey and a class survey to the site.
- Continued working on the Supplemental Application for Conservatory.
- Created an application for the Registrar’s Office to allow its administrative users to add/delete users to their web applications (Ferpa, Grade Change Form, Math Placement and PeopleSoft Links).
- Converted the GATS Purchase Order form to be AJAX enabled and submitted.
- Create an ecommerce page for David Burford for SCE.
- Worked on Blackboard tasks. This involved moving a procedure over from BB8 to BB9 and then troubleshooting why the procedure wouldn’t compile. I ended up modifying a called procedure to have the same number of input parameters that the procedure was passing in.

**IPS Highlights**

**Ecommerce**

- School of Nursing Benner online program registration and administration
- School of Nursing miscellaneous online payment option
- Scholarship pre population links for Advancement donation page
- School of Nursing Women’s Health Symposium individual and group registration
Web Development

- Facet Conference online registration and registration tracking
- CAS BLA programs bulk email advertising
- Exit Exams migration and integration
- Help with SCE email form
- EMBA online session sign up form
- Material Safety Data Sheet site fix
- New Letters contest page set up for 2011
- PR home page set up for 2011
- Communiversity new website design and implementation
- Administrative Service training session page troubleshooting
- Made some requested enhancements to the BBUR request system
- Created the administration site for the Supplemental Application for Conservatory
- The Supplemental Application for Conservatory was moved into production
- Enhanced the Kasey Kudos application with an auto complete lookup box
- Made enhancements to the Drug Information Center application for Pharmacy
- Created a landing page for the Student Kiosks Ecommerce project