INFORMATION SERVICES
5 Year Goals and Objectives
July 2009 – June 2014

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

2014 Goals:
1. Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
2. User technologies and support that enhance and facilitate Teaching and Learning, Research, Service, and Economic Development.
3. Effective and efficient management of resources.
4. Accurate, understandable, and accessible communication, documentation and resource use.
5. Continuous improvement in services, facilities, and professional development.

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

2009 IS Project List and Point Person:
- ILE Hybrid Classroom Integration – 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
- Email Migration – Schonemann/Networking
- Server Virtualization – Schonemann/Networking

Details on each of the above projects can be found in the individual sections for the responsible department.
INFORMATION SERVICES
5 Year Goals

Goal #1: Infrastructure that delivers seamless, secure, reliable, anytime and
anyplace user access.
   - Student Live @ EDU Project
   - Increase the ILE Classroom availability
   - Upgrade Building Wiring Infrastructure
   - VoIP Roll Out
   - Expand Wireless Systems
   - Network Core and Building Electronics Lifecycle
   - Network new buildings and Residence Halls
   - Course capacity/technology project

Goal #2: User technologies and support that enhance and facilitate teaching
and learning, research, service, and economic development.
   - New Campus Web Server Architecture and Content Management Project
   - Increase the ILE Classroom availability
   - Increase overall awareness and feedback for the ILE Classroom systems
   - VoIP Roll Out
   - Expand Wireless Systems
   - IT Support Services become more accessible, visible and available to the
campus community
   - Improve campus computer lab experience and resources
   - Course capacity/technology project

Goal #3: Effective and efficient management of resources.
   - Restructure Classroom Technology Department to adequately support the ILE
   Classroom systems and campus AV projects
   - Increase efficiency in delivery of services
   - Expand efforts to comply with “green” computing initiatives including energy
   reduction and recycling.
   - Provide advanced technical expertise and services to UMKC academic units,
   IT Liaisons and UMKC departments
   - Course capacity/technology project
Goal #4: Accurate, understandable, and accessible communication, documentation and resource use.

- Storage Management: Accounting, Reporting and Allocation
- Disaster Recovery Planning and Procedures Project
- Overhaul of IS Related Security Policies and Enforcement of Policies
- Increase Security Awareness
- Upgrade Software Deployment
- Change Management - changes to IT resources are organized, timely and well-communicated
- Course capacity/technology project

Goal #5: Continuous improvement in services, facilities, and professional Development.

- Implement an IS Project Management Office
- Increase the ILE Classroom availability
- Increase professional development opportunities for staff
- Infrastructure Improvement
- Expand Wireless Systems
- Network Core and Building Electronics
- Lifecycle replacement schedule
- Network new buildings and Residence Halls
- Data Leakage Prevention
IS PROJECT - Implement an IS Project Management Office – Removed from IS/IA goals.
This goal has been removed from the IS/IA goal list; Project Management is now a permanent part of IS.

ILE Hybrid Classroom Integration (Goals 1, 2, 5)
The “ILE Hybrid” system allows us to provide basic AV systems into the smaller rooms at a fraction of the cost of a full ILE system. Adding these systems will have a huge impact on the availability of ILE technology to the UMKC Faculty. The Hybrid project started in early February 09 and sixty-two (62) classrooms were selected for upgrades. The upgrades for these rooms were broken into two phases. Phase-1, scheduled to run through June of 2010, consists of upgrading (55) classrooms, currently without integrated AV. Phase-2, scheduled to run from July 2010 through December 2010, consists of upgrading seven classrooms currently with limited ILE systems. During the current review period, ILE Hybrid upgrades have been completed in 43 of the 55 phase-1 classrooms. As a result, the number of UMKC ILE classrooms has increased from 79 to 122. During the next two review periods, this number will increase again from 122 to 141. At which point, 75% of all UMKC classrooms will have integrated ILE systems and UMKC will have nearly doubled the number of classrooms with ILE AV systems.

Critical Issues:
- Additional funds are needed on a yearly basis. As we add additional classrooms, our maintenance/lifecycle pool funds are stagnate and insufficient to maintain a 3 year lifecycle on all of the system components.

IS Goals Supported:
- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.
Restructure CTS to adequately support the ILE Classroom systems and campus AV projects independently (Goals 3, 5)

During this review period we have made several changes in our organizational structure. We added a second AV Supervisor to our team so we can now have one team focused primarily on departmental and new construction projects, and one team focused on providing ILE classroom technology and supporting existing systems. We will eventually need to fill in with additional technicians in each area. For now, both teams are sharing resources and we are maintaining a cross trained environment.

We have also added a second AV designer to our team. We have been one deep in this area resulting in a bottleneck on designs for new projects. This position will help streamline this process and alleviate the choke point.

The final structural change we have made is shifting from full time system checkers to part time system checkers. As a result of this change, we have added four part time staff members to our morning shift (5am - 9am) for maintenance and functionality testing. This will allow us to check all of our classroom systems each day at a fraction of the cost and allow us to shift resources (one and/or possibly two of our current full time staff) to the normal day shift (7am – 4pm) for support during the busier hours of the day.

Critical Issues:
- It is difficult to ensure that the entire campus receives equal levels of support with the geographical boundaries that exist. This might require additional FTE in some of our remote locations.
- It is difficult to allocate adequate time for quality cross training due to the density of our project load.
- Technology changes so rapidly that keeping staff trained and skilled on new technologies before we are required to implement them is very difficult.

IS Goals Supported:
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that is accurate, understandable and accessible.
- Continuous improvement in facilities, service and professional development.

Increase awareness and feedback surrounding the ILE Classroom systems (Goals 2, 3, 4)

During this review period we conducted several one-on-one ILE user training sessions with faculty. We continue to work with the Registrar’s office to assist in marketing ILE user training to faculty at the start of classes. We have added additional ILE related questions/answers to the Right Answers Knowledge base. We have updated information about ILE classrooms on our website and will continue to maintain its accuracy. Lastly, we have revised our ILE survey which will be sent out every semester.

Critical Issues:
- Some resources we plan to augment are web based. Currently, we do not have staff with expertise in this field.
• Some faculty and student requests are difficult to incorporate/consider on an enterprise scale.
• It is difficult to maintain system standardization when requested changes are not consistent for all ILE classrooms.
• Most major system changes have to wait for a lifecycle upgrade for implementation because of fiscal restrictions.

Ongoing Action Items:
1. Continue to update and post training manuals for ILE systems
2. Continue to market ILE user training at the start of every semester through Registrars office and ITS
3. Continue to develop ILE content for the knowledge base. Review and add content as needed
4. Evaluate ILE classroom design continuously, taking into consideration information received from surveys

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.

Increase professional development opportunities for staff (Goal 5)
Professional Development goals have been identified and included in each staff member’s performance evaluations. These goals will be reviewed bi-annually. Training materials have been purchased to allow for more in-house training to reduce budget expenses. We have various required training seminars and campus-offered training events scheduled for staff this year.

Critical Issues:
• It is difficult for our staff to find time to work on their professional development skills. When needed, some staff might need to work on developing these skills during their personal time.
• Allowing staff to attend training during working hours impacts our level of service.

IS Goals Supported:
• Effectively and efficiently manage resources.
• Continuous improvement in facilities, service and professional development.

Individual Educational Technology Services accomplishments this period –
1. Completed $813,298.52 worth of AV projects during this review period.
2. Serving on New Student Union Technology Committee – Justin Guggenmos
3. Serving on MNL Library Expansion Committee – Justin Guggenmos
4. Attended regular Campus Facilities Project Review meetings – Justin Guggenmos
5. Campus Project Manager for Cisco Tele-presence conferencing room – Justin Guggenmos
6. Completed UPS/Generator Project for AC – Justin Guggenmos & Jim Schonemann
7. Added second AV Supervisor to team – Terry Easley  
8. Added second AV System Designer to team – Brian Diltz  
9. Converted morning maintenance and functionality testing of ILE systems to be covered by PT staff and added four PT AV Technicians to the team.  
10. Completed Cisco TelePresence project – installed peripheral far-side LCDs and Document Camera (Lifecycle cost - $10,026.31).  
12. Completed – AC Polycom Cart project – new video conferencing mobile cart to support AC (Lifecycle cost - $6,219.53).  
13. Completed ILE WRP for 2009 computers (Lifecycle costs – $19,264.00)  
14. Completed Campus-wide Tegrity Upgrade project – will allow Tegrity usage from any ILE Classroom (Lifecycle cost - $26,882.00).  
15. Completed ILE Classroom and projector maintenance during summer break.  
17. Completed PAC Green Room - Digital Signage Project installation (Lifecycle cost – $3,474.80).  
18. Completed FH 428 Conference Room – Polycom capable meeting room (Lifecycle cost - $18,050.99).  
19. Completed Diastole Kiva Room – Hybrid meeting room (Lifecycle cost - $12,160.63).  
20. Ongoing - ILE Hybrid Project – 66% complete (42 of 64 rooms), project completion date est. of July, 2010 (Lifecycle cost - $515,503.17).  
   - SOE – 12 of 13 systems installed  
   - BS – 5 systems installed  
   - LS – 2 systems installed  
   - BSB – 1 system installed  
   - SRC – 3 systems installed  
   - CH – 3 systems installed  
   - RH – 3 systems installed  
   - GH – 6 systems installed  
   - PAC – 2 systems installed  
   - FH – 3 of 6 systems installed  
   - HH – 2 of 3 systems installed  
   - KP – 4 systems planned  
   - SOM – 2 systems planned  
   - NHSB – 5 systems planned  
   - NLD – 5 systems planned  
21. Ongoing - Planning, designing, testing and installation of the Chancellor’s Focus Room; 90% complete (Lifecycle cost - $53,233.44).  
22. Ongoing – SON NHSB 3301 Retrofit for student desk microphones; installation 90% complete (Lifecycle cost - $103,982.84)  
23. Ongoing – School of Dentistry Classroom renovations; AMX programming for additional classrooms  
Efforts of the Information Access Division during the period February through July 2009 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)** moved Blackboard hosting from St. Louis to Columbia and began offering Moodle as a complimentary tool to Blackboard. The campus continues an upward usage trend with Wimba and Tegrity.

**Information Manipulation Services (IMS)** spent resources and time on large projects for the School of Dentistry, Conservatory, Bloch School of Business and Women’s Council.

**Information Presentation Services (IPS)** continued to create a high quality web development UMKC. Highlight projects during this time period included six e-commerce projects and development on the new UMKC web site.

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**

1. **Blackboard Intercampus Collaboration (BbIC)**
   - Moved hosting from UMSL to UMC
   - Converted BBIC to LTIC to incorporate other Learning Technologies

2. **Horizon Wimba**
   - Wimba expansion on campus continues to increase
   - Prepared campus to use Wimba as an option to continue teaching in case of emergency or disaster
   - Saw an increase in Wimba usage for non-class related events

3. **Learning Objects**
   - Continued license with Learning Objects tools for Blackboard
   - Wiki interest increased
   - Blog interest increased

4. **Podcasting – Tegrity**
   - Expanded Tegrity usage to campus wide access
   - Produced a total of 243 podcasts with 3671 views
   - Renewed contract with Tegrity for multiple years
• Worked with CTS to upgrade over 50 additional ILE classrooms to be Tegrity capable.

5. SharePoint
• Increased usage to approximately 100 SharePoint sites on campus from 30 sites the same timeframe one year ago.

6. Instructor Evaluations
• Conducted Instructor and Course Evaluations for School of Dentistry and Nursing, Conservatory of Music, School of Computing and Engineering and others
• Developed SB389 evaluation tool for campus and implemented first set of results

Usage Data

Blackboard

<table>
<thead>
<tr>
<th>Academic Unit</th>
<th>SP 08</th>
</tr>
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<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>15,562</td>
</tr>
<tr>
<td>Conservatory of Music</td>
<td>797</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>2,110</td>
</tr>
<tr>
<td>School of Business and Public</td>
<td>2,918</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>School of Computing and Engineering</td>
<td>3,544</td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>1,979</td>
</tr>
<tr>
<td>School of Education</td>
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<tr>
<td>School of Graduate Studies</td>
<td>28</td>
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<tr>
<td>School of Law</td>
<td>430</td>
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<tr>
<td>School of Medicine</td>
<td>1,185</td>
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<tr>
<td>School of Nursing</td>
<td>1,479</td>
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<tr>
<td>School of Pharmacy</td>
<td>1,900</td>
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<td><strong>Grand Total</strong></td>
<td><strong>34,016</strong></td>
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Number of course sites

<table>
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</tr>
</thead>
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<tr>
<td>College of Arts and Sciences</td>
<td>901</td>
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<td>Conservatory of Music</td>
<td>159</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>68</td>
</tr>
<tr>
<td>School of Business and Public</td>
<td>142</td>
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<tr>
<td>Administration</td>
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</tr>
<tr>
<td>School of Computing and Engineering</td>
<td>314</td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>74</td>
</tr>
<tr>
<td>School of Education</td>
<td>212</td>
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<tr>
<td>School of Graduate Studies</td>
<td>4</td>
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<tr>
<td>School of Law</td>
<td>70</td>
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<tr>
<td>School of Medicine</td>
<td>140</td>
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<tr>
<td>School of Nursing</td>
<td>67</td>
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<tr>
<td>School of Pharmacy</td>
<td>52</td>
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<td><strong>Grand Total</strong></td>
<td><strong>2,203</strong></td>
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**INSTRUCTOR**

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<tr>
<th>INSTRUCTOR</th>
<th># Students</th>
<th># Classes</th>
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<tbody>
<tr>
<td>Benevides</td>
<td>James</td>
<td>196</td>
</tr>
<tr>
<td>Gounev</td>
<td>Andrea</td>
<td>174</td>
</tr>
<tr>
<td>Gounev</td>
<td>Todor</td>
<td>258</td>
</tr>
<tr>
<td>Honigberg</td>
<td>Saul</td>
<td>143</td>
</tr>
<tr>
<td>Lee</td>
<td>Kristin</td>
<td>88</td>
</tr>
<tr>
<td>Lindholm</td>
<td>Lyla</td>
<td>69</td>
</tr>
<tr>
<td>Lynn</td>
<td>Jolene</td>
<td>88</td>
</tr>
<tr>
<td>Martin</td>
<td>Eric</td>
<td>38</td>
</tr>
<tr>
<td>Mick</td>
<td>Katherine</td>
<td>54</td>
</tr>
<tr>
<td>Sherman</td>
<td>Marne</td>
<td>82</td>
</tr>
<tr>
<td>Singh</td>
<td>Gurmukh</td>
<td>6</td>
</tr>
<tr>
<td>Smith</td>
<td>Jack</td>
<td>3</td>
</tr>
<tr>
<td>Stoddard</td>
<td>Elizabeth</td>
<td>115</td>
</tr>
<tr>
<td>Wilson</td>
<td>Thad</td>
<td>37</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td>1351</td>
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</table>

**Period**

<table>
<thead>
<tr>
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<th>Number of Classes</th>
<th>Number of Students</th>
</tr>
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<tbody>
<tr>
<td>01/08-07/08</td>
<td>14</td>
<td>1080</td>
</tr>
<tr>
<td>01/09-07/09</td>
<td>16</td>
<td>1351</td>
</tr>
<tr>
<td><strong>% change</strong></td>
<td>14.3%</td>
<td>25.9%</td>
</tr>
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</table>

**Wimba**

<table>
<thead>
<tr>
<th>Period</th>
<th># Rooms</th>
<th># Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/08 - 7/08</td>
<td>71</td>
<td>2154</td>
</tr>
<tr>
<td>01/09 - 7/09</td>
<td>360</td>
<td>6635</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>407.04%</td>
<td>208.03%</td>
</tr>
</tbody>
</table>

**Remedy Statistics**

1) **Support Issues: User Type**

<table>
<thead>
<tr>
<th>Support Issues: By Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
</tr>
<tr>
<td>Faculty</td>
</tr>
<tr>
<td>GRA</td>
</tr>
<tr>
<td>Staff</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
## 2) Support Issues: Software

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard</td>
<td>77%</td>
</tr>
<tr>
<td>Digital Media</td>
<td>1%</td>
</tr>
<tr>
<td>e-Instruction</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>Wimba</td>
<td>3%</td>
</tr>
<tr>
<td>Learning Objects</td>
<td>1%</td>
</tr>
<tr>
<td>Listserv</td>
<td>11%</td>
</tr>
<tr>
<td>LockDown Browser</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>Respondus</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>SharePoint</td>
<td>1%</td>
</tr>
<tr>
<td>Tegrity</td>
<td>1%</td>
</tr>
<tr>
<td>Turnitin</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>Null</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

## 3) Support Issues: Origin

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct ITS Contact</td>
<td>47%</td>
</tr>
<tr>
<td>Support Services</td>
<td>39%</td>
</tr>
<tr>
<td>Web Submission</td>
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</tr>
<tr>
<td>Other/Null</td>
<td>0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

## 4) Support Issues: Department

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>30%</td>
</tr>
<tr>
<td>Bloch School of Business</td>
<td>5%</td>
</tr>
<tr>
<td>Conservatory</td>
<td>3%</td>
</tr>
<tr>
<td>Libraries</td>
<td>2%</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>2%</td>
</tr>
<tr>
<td>S. of Computing &amp; Engineering</td>
<td>4%</td>
</tr>
<tr>
<td>S. of Graduate Studies</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>8%</td>
</tr>
</tbody>
</table>
### 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>
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<tr>
<td>FS2008</td>
<td>705</td>
<td>169,048</td>
</tr>
<tr>
<td>SP2009</td>
<td>759</td>
<td>158,949</td>
</tr>
</tbody>
</table>

Between February and the end of July 2009, we had almost 18,778 listserv postings which went sent out 7.8 million emails to subscribers.

### Podcasting:
- Over 100 rooms on campus are now capable of producing podcasts
- Over 1300 podcasts/coursecasts with 27,000+ views
- Over 75 instructors on campus producing podcasts
- Conducted one on one training sessions with instructors
- Conducted analysis of project till date and developed a detailed executive report
- Renegotiated contract with Tegrity to expand campus wide
- Moved podcasting project out of pilot mode

### Distance Education/E-Learning:
- Conducted research/analysis of distance education programs at various universities across the country
- Work with UM System team on distance education and process to hire an instructional designer
- Liaison to UMKC eLearning committee
- Videotaped/streamed over 25 courses and tens of ad hoc sessions to various locations over the state
- Revamping Conservatory course for multiple distribution methods
Multimedia Outreach

- Established a YouTube channel for the University through which we are delivering open courseware style video lectures
- You Tube ranking in the top 20 for most viewed content in Higher Education

The Academic Enhancement group within ITS worked on many UMKC high profile events and renewed its mission to assist instructors by using multimedia to improve course instruction.

- Produced 18 animated segments for the 2009 Alumni Awards Dinner.

**IMS Highlights:**

**February**
Moved the administrative site for the MDC ecommerce Web application into production.
Created an Ecommerce application for the Women’s Council - designed to accept payment for new and renewal memberships.

**March**
Refined and enhanced the CE application for dentistry which is used to print out certificates for attendees who completed the Midwest Dental Conference.
Refined and enhanced an ecommerce application for Bloch CE and the application went live in March 09.

**April**
Created a Strategic Planning web site for Gail Hackett and collaborated with Troy Lillebo on its design and content.
Arts and Science Faculty Election Web application went live this month.
Added CAPTHCA code to several suggestion box forms on campus.
Conservatory Continuing Education ecommerce application went live this month.

**May**
Successfully moved UMSL’s code for snapshot to the new UMC application server for Blackboard.
Completed the Conservatory Continuing Education ecommerce Administrative application which allows them to view the ecommerce transactions for their continuing education classes.
Created a snapshot for our Moodle installation

**June**
Started developing an ecommerce application for the Bloch School Real Estate office.
The Bloch Real Estate ecommerce application was finished and moved to production.
The Bloch Continuing Education office wanted enhancements made to their ecommerce application.
July
Created an ecommerce application for the Conservatory Real Estate department. Developed several queries needed to import courses/users/enrollment into Moodle. Opened up the Summer School Survey web application for new visiting students. Modified and enhanced the Conservatory Continuing Education ecommerce application in order to comply with UM standards and to pass the ecommerce audit. (The application did pass the audit and was converted to use the new Conservatory mocodes for chargeback.) Created an Oracle function for the PaperCut CBORD Gateway interface project. This consisted of establishing a new schema/userid on Oracle (KCORA4) and creating a new function to return an empid when an SSO ID was passed to it. The function is called using a simple SQL query statement of “select FunctionName from dual”. Converted and created the PDF files for A&S SP2009 teaching evaluation data.

**IPS Highlights:**

**Ecommerce**
- Student Life Office – Roo Camp 2009 Online registration
- Nursing Ecommerce modifications and support
- New Letters updates
- Ecommerce Phase 11 preparation to production
- Event Registration design & implementation
- Nursing “Protecting Your Practice” event online registration
- Communiversity course feeding updates for Summer 2009
- UMKC Debate team online donation
- Library online member registration changes

**Web Development**
- Troubleshooting HR website (ReCaptcha, migrating to new server problem)
- Troubleshooting International Academic Programs website, converted access to ms sql, built online admin site.
- New campus website phase 1: backend for home page dynamic elements (rotation photos, news and announcements, important dates, marketing tiles, emergency msg), new PR site, and new AZ index.
- FaCet Conference 2009 online registration
- Community Service website
- Press releases troubleshooting
- Department listings troubleshooting
- Nursing Survey troubleshooting
Networking & Telecommunications
Goals and Objectives Update
February – July 2009

IS PROJECT - Expand Wireless Systems (Goals 1, 2, 5)

With 266 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 moving to light weight access points for easier management of the growing number of units. See Appendix for current buildings with wireless coverage.

Critical Issues

- New wireless standards like 802.11N, projected to be approved in January of 2010, 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 coming out as well. This will require replacing at least some blades in network switches with new blades that support the new power standard. We have already started this process and are 90% complete.
- With hundreds of access points deployed managing them individually and security issues become major problems. We should finish the migration to lightweight access for central management and security during 2009.
- 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 anywhere user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.
Upgrade Building Wiring Infrastructure (Goals 1, 5)
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 and have started in the Law School. We hope to complete the Law School upgrade to Category 6 cable in 2009 and then move to 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 20010-11. 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.
- Assessment of and responsiveness to campus information technology needs.
IS PROJECT - VoIP Roll Out (Goals 1, 2, 5)

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 buildings and Dental School. 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.
• Assessment of and responsiveness to campus information technology needs.

**IS PROJECT - Disaster Recover (Goals 1, 3, 5)**

Existing data centers are not being used redundantly. This project will upgrade the data storage and backup hardware, using current technologies like virtualization and SAN replication to take advantage of diverse locations. This will provide high availability and greater fault tolerance for servers.

**Critical Issues**
- Insufficient backup resources to protect existing servers.
- Unreliable backup software.
- Existing data is vulnerable to a single site disaster.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:**
- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.
IS PROJECT - Email Migration (Goals 1, 3, 5)
Student Email accounts are being migrated to Microsoft Live Mail partially as cost saving but also to provide additional services. These include, a permanent account that they can keep after they graduate, additional storage and Live Mail collaboration tools. Student can begin migrating starting July 27th, 2009.

Critical Issues
- We lose control of the hardware and application software.
- A MOREnet outage will take down student on campus access to Email.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:
- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.

Project Completion & Timeline
5 Year Plan

[Diagram showing project completion and timeline]
Jan-Jun 2009
Jul-Dec 2009
**IS PROJECT - Server Virtualization (Goals 1, 3, 5)**

Existing data centers are nearing capacity for space, power and cooling. Virtualization of over 100 servers will reduce the loads in all three of these areas. Virtualization allows the separation of the host operating systems from the physical hardware making the systems more reliable, scalable and efficient.

**Critical Issues**
- Existing servers are vulnerable to hardware failures.
- Existing servers are vulnerable to a data center disaster.
- Many existing servers are in need of life cycle replacement.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:**
- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.

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**Project Completion & Timeline**

5 Year Plan

- [ ] Completed
- [ ] Projected Completion

![Graph showing project completion timeline](image-url)
Move PSTN Trunks to IP Systems (Goals 1, 3)
UMKC currently has 10 T1 smart trunks to the Public Switched Telephone Network (PSTN), 9 for in and outbound calls and 1 for long distance calls. All of these trunk lines started out connecting to the PBX. As the installed base of IP phones increase we will move 1 or 2 trunks at a time over to IP systems.

Critical Issues
- The campus PBX is 25 years old and a catastrophic failure would require an immediate cutover of the trunks to IP systems.
- This project is dependent on the VoIP phone rollout. If that project is delayed then so would this project.
- 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](image-url)
Network Core and Building Electronics Lifecycle (Goals 1, 3, 5)
UMKCnet has over 220 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
- 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.
- Assessment of and responsiveness to campus information technology needs.
Network new buildings and Residence Halls (Goals 1, 5)
UMKC is currently building a new Residence Hall, Johnson Hall, a new Student Union and a new soccer/track complex. Johnson Hall will open Fall Semester 2009 and the Student Union fall of 2010. The track building will open October of 2009. All of these projects require extensive planning, engineering and staff time both before and during the buildings construction.

Critical Issues
- Some of these buildings UMKC outsourced the ongoing management which requires separate contract negotiations for the services we provide.
- Additional students living on campus 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.
- Assessment of and responsiveness to campus information technology needs.

Move Hospital Hill Fiber Optic Cable Off of Utility Poles (Goals 1, 3)
UMKC had almost 4 miles of fiber optic cable strung on utility poles along Troost Ave. from the Volker campus to Hospital Hill. A Kansas City redevelopment plan required the removal of these poles which required us to remove our fiber. Information Services successfully negotiated an agreement to use fiber optic cable from KCP&L. We have now cut over to this new fiber and our running all voice and data services to Hospital Hill across this fiber.

Critical Issues
- Now that the new link is in place UMKC is dependent on KCP&L repair times if there is a break or outage.
- If UMKC would have had to purchase or install new fiber cost could run $800,000 to $1,000,000. Networking & Telecommunication does not have funds for this expensive of a project.

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.
Appendix

Individual Networking and Telecommunication accomplishments this period:

1. Repaired fiber cut at Bloch School of Business.
2. Networking & Telecommunication staff attend over 312 hours of training during this reporting period.
3. Upgraded the operating systems on over 300 network devices with the latest security patches and updates.
4. Converted IS Call Center call queue to IP system.
5. Staff member served as the campus building liaison representative.
6. Converted Spencer Chemistry Voice over IP phone system.
7. Completed over 345 adds, moves and changes on the voice and data networks.
8. Responded to, solved and closed over 122 trouble tickets recorded in Remedy.
9. Fiber Optic backbone installed in Grant Hall.
10. Added Meeting Place conference service to voice system.
11. Installed over 546 Voice over IP phones.
12. Converted Oak Street Residence Hall to Voice over IP phone system.
13. Processed over 2.7 million calls through voice systems.
14. Staff member served on the campus recycle program committee.
15. Converted Welcome Center call queue to IP system.
16. Upgraded the operating system on all wireless access points (268) with the latest patches and updates.
17. Fiber Optic cable installed into 5301 Holmes Ave.
18. Added Click to call VOIP service.
19. Marked University buried cable plant locations as required by law for Missouri One Call over 351 times during this report period.
20. Converted Dental School Operators call queue to IP system.
21. Converted campus wireless system to “light weight”.
22. Finish infrastructure upgrades (CAT6) in the Biological Sciences Building.
23. Serviced on the new Student Union building committee.
24. Wireless Access Points added to 5325 Rockhill, 5245 Rockhill, SASS and School of Dentistry.
25. Converted School of Dentistry to Voice over IP phone system.
26. Two Public Switched Telephone Network T1’s added to VoIP network.
27. Converted Cashiers Office call queue to IP system.
28. Added Power over Ethernet Switches to Grant Hall, Performing Arts Center, Law School, University Center, Health Sciences Annex, Administrative Center, 4825 Troost, and Biological Sciences.
29. Converted Biological Sciences to Voice over IP phone system.
### UMKC WIRELESS INVENTORY

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Count</th>
<th>Average Monthly Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>124</td>
<td>$9,260</td>
</tr>
<tr>
<td>Sprint PCS/Nextel</td>
<td>172</td>
<td>$9,333</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>41</td>
<td>$1,820</td>
</tr>
<tr>
<td>Verizon</td>
<td>24</td>
<td>$1,639</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>361</strong></td>
<td><strong>$22,052</strong></td>
</tr>
</tbody>
</table>

- **AT&T** 34%
- **Sprint PCS/Nextel** 48%
- **T-Mobile** 11%
- **Verizon** 7%

**Vendor Count**

- **AT&T**: 124
- **Sprint PCS/Nextel**: 172
- **T-Mobile**: 41
- **Verizon**: 24
- **Totals**: 361
Wireless Coverage Map – University of Missouri-Kansas City
The list below is for the period of January 1, 2009 to June 30, 2009:

1) Provided handling of information security incidents as necessary.
2) Research on network security architecture.
4) Conducted research on VMWare Virtual Desktop Infrastructure as part of the Virtual Computer Lab project.
5) Installed two new servers and a PDU at the Newcomb Hall Data Center.
6) Attended class for deployment and implementation of the Impulse appliance.
7) Migrated from McAfee VirusScan (and ePO) to Microsoft Forefront (and MOM) for campus wide anti-virus solution.
8) Updated AppScan to version 7.
9) Loaned Observer SAN to Central Systems to work on a DPM solution for campus.
10) Worked on smartcard management system.
11) Update LANguard to version 9.
12) Ran Vulnerability Scans of UMKCnet.
13) Worked on a project to identify all web servers on campus.
14) Installed a new Vtrak Disk array in Newcomb Hall Data Center.
15) Conducted research on different backup software to replace BackUp Exec software.
16) Began testing Windows 7 operating system on workstations and laptops.
17) Attended training on securing virtual environments and setting up supporting SAN’s.
18) Performed a Web site AppScan for the College of Arts & Sciences.
19) Updated several ISSR servers to Windows Server 2008.
20) Monitor new Forefront systems.
22) Rebuilt the certificate server after it was corrupted.
23) Began using nmap to augment LANguard in scanning the network for problems.

Research on the ASUS EeePC – a netbook and how to use it on the wireless n
Software – Deployment of Office 2007 and Windows Vista (Goals 2, 4)

Progress has continued on Windows Vista and Office 2007 deployments during the past 6 months although at a slower rate than originally projected. In large part this was due to the economic downturn which caused a necessary delay and reduction in the purchase of computer equipment. In many cases Windows Vista requires new, more robust hardware, so progress on this project was deferred. Microsoft’s Office 2007 deployments were also affected by the halt in spending with only a slight increase in number of systems running this MS productivity suite.

- Software deployment progress:
  - Office 2007
    - 81% for ISSS clients (compared to 78% on 1/31/2009)
    - 67% for entire campus (compared to 62% on 1/31/2009)
  - Windows Vista
    - 40% for ISSS clients (compared to 19% on 1/31/2009)
    - 29% for entire campus (compared to 15% on 1/31/2009)

Because both Office 2007 and Windows Vista are now considered part of the standard suite of software that is deployed automatically and do not have a specific start and end date, this project is being rolled into production. It will be discontinued as an IS top project.

Effective and efficient management of resources (Goals 2, 3, 4)

- Collaborated with University Libraries to write an RFP for a new print management solution that integrates UMKC’s One Card system with printing and photocopying in IS Labs and University Libraries. This new system, which will be available in the fall of 2009 allows students who deplete their weekly quota allocation to easily and automatically continue printing or photo copying using their Roo Bucks.

- Researched, tested and configured a Remote Labs website based on Windows 2008 Remote Desktop Services and Microsoft’s Hyper-V technology. Failover clustering for redundancy was also implemented with this solution. This new technology will provide students with access to important software applications that until now have only been available on the UMKC campus in student computer labs. Students equipped with a laptop will be able to access specific applications or entire desktop environments from just about anywhere. A pilot project is being planned for fall 2009.

- Collaborating with UM committee to review and implement a hosted solution for student email. Currently UMKC students are provided Exchange accounts. Hosted solutions can
provide UMKC students with expanded services including 10GB mailboxes, 25GB online storage and many other desired features. During the past 6 months significant discussion, planning and testing has occurred among the campuses. Students helping to pilot an initial solution have been relocated back to Exchange in preparation for a move to the new domain. Progress has stalled over the summer because the new system could not support UM’s multi-campus system with the desired branding on the student email accounts, which was a mandatory requirement. More work continues on this project.

- Worked with IS Networking and Telecommunications to convert the Call Center phone system from PBX to IP system. Retrained staff to use the new system. The new IP telephony replaces antiquated technology with a state of the art system that sets the stage for better call tracking and reporting.
- Implemented a new and improved method for students to manage their data and profile information in IS labs. The newer technology is called redirected folders. It replaces roaming profiles, which had grown difficult to manage and use. New scripts were developed that work with redirected folders to automate the clean up process and provide a more user-friendly system for students.
- Provided IT support for the Bloch School and School of Biological Sciences while searches were conducted for new technicians. Partnered with Bloch, Biological Sciences and the Rural Nursing program to mentor new IT staff in these areas
- Provided coordination, design, implementation and ongoing technical support for the Point-n-Click patient management system installed for Student Health and Wellness
- Managed Dell Certifications for warranty parts for the entire UM System
- Reduced hardware and software costs (where possible) by consolidating orders and collaborating with other UM campuses. (See additional details under Support Services Accomplishments)
  Created more stable, redundant and manageable environment for print servers migrating to virtual server instances

Critical Issues:
- Funding for replacement of computing equipment falls short of need, thus leaving obsolete technology on the network
- A few departments will not use standardized management tools such as SCCM, thus creating inefficiencies for asset management and deployment of software
- As our abilities and technology continue to expand and improve management of Apple systems, some users resist use and deployment of these tools

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

Make IT services more accessible, visible and available to the campus community (Goal 2)
• Collaborated with Student Affairs and other Information Services departments to install, configure and support a new four-station student computer lab in Johnson Hall. Closed student computing lab in Cherry Hall.

• Improved communication through extensive use of IS website, change management application, knowledgebase and various other tools.
  o Updated the IS website so that the format now conforms to new UMKC web guidelines. Information is presented in a more user-friendly format.
  o Added more information on the IS website to include IT training, FAQs, top 10 IS websites, etc.
  o Added new content to the UMKC Knowledgebase detailing changes in technology, UM procedures and processes

• Participated in campus events and activities and made services accessible to campus community
  o Provided specialized technical services for special events, including UM Curators meetings, various conferences, radio broadcasts, and other high-profile engagements
  o Provided technical support and lab space for several student orientation events throughout the spring and summer months
  o Provided support at the annual KC area GIS conference held at UMKC in March, where local businesses and community organizations showcased their GIS-based activities to the academic community.

• Provided computer and network support for UMKC students living on campus

• Worked with UM campuses to make Microsoft’s Home Use Program available to UMKC’s faculty and staff. This program provides significantly reduced pricing for personal copies of Microsoft software.

Critical Issues:
• Often specialized requests for IT support are made with little or no notice
• Student support requests may extend beyond the scope of services that can be provided
• Funding for additional staff to meet growing demand for IT support services, security initiatives and other emerging technologies

IS Goals Supported:
• Provide user technologies and support that enhance and facilitate research, service, teaching and learning and economic development.

Accurate, understandable, and accessible communication, documentation and resource use
• Documented ISSS server layout- outlined all of our servers (physical and virtual), and their uses, itemized software licensing, backup and reboot schedules, passwords, VLAN configurations, etc.
• Created signage for IS labs encouraging students to conserve paper and informing them of ways to use technology to reduce printing
• Created and updated documentation on Mac support website to reflect newer software versions and common support issues
• Built a data entry and web reporting infrastructure for documenting IS policies, procedures and server infrastructure to improve communication and promote cross training initiatives

**Continuous improvement in services, facilities, and professional development**

• One technician earned the Microsoft Technical Specialist certification for Windows Vista
• Coordinated a campus-wide, on-site, free day of professional training on EndNote
• Attended training and professional development on the following:
  - SQL Reporting
  - Windows Vista
  - EqualLogic SAN
  - VMWare
• Served on UM committee to review and write an RFP for IT training

**Support Services - January 2009 – July 2009 Accomplishments**

• The Call Center responded to 12,810 support requests, resolving 11,067 tickets and escalating 1,743 tickets. The Call Center’s first-call resolution rate was 86%.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Call Center Support Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 &amp; Q4 2006</td>
<td>10175</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2007</td>
<td>12102</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2007</td>
<td>11120</td>
</tr>
<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>
</tbody>
</table>

• Over the last five years, the support volume in **Support Services** has steadily increased. Comparing the periods of January – July 2008, and January – July 2009, we have seen a 14% increase in support requests this year as compared to last. Month to month, the support request volume continues to increase by an average of 322 requests over this same period last year:
This increase can be attributed to many factors, including a larger on-line interactivity demand (Pathway, on-line applications, MyHR, etc.), increased use of Blackboard and other classroom technology tools and increased campus awareness of the Call Center as the IS contact point.

Customer satisfaction continues to grow as well. The following chart represents customer satisfaction data collected from surveys closed by IS Support Services for the period of January 31st, 2009 and July 31st, 2009.
Responded to and resolved 2133 onsite desktop support requests in the past 6 months

Continued to work with UM Procurement to learn more about and use the eProcurement system.

Analyzed options and performance of duplex printing in IS Labs as method of saving money and contributing to green initiatives.

Assisted Arts & Sciences with acquiring and configuring new general-use network file storage resources for the entire College.

Consulted with Center for Economic Information to plan for migrating their server-based applications to IS-hosted equipment. This was a great opportunity to assist Economics, utilize virtualization technologies and ensure better management of devices on the network. Migration of data and applications began in June.

Identified 29 computers in two high-usage A&S labs that would be obsolete by FS09. Provided preliminary cost analysis and justificatory documentation for immediate replacement of hardware.

Consulted with faculty in affected departments to determine how best to meet specific hardware needs in light of current budget constraints.

Upgraded SPARK lab computers – located and installed twelve Optiplex GX280 systems and flat panel monitors to replace legacy PCs and CRT monitors.

Developed asset tracking solution for the Mac platform which integrates well with existing inventory reporting tools already in use for Windows systems. Previously, there was no reliable method for generating an accurate count of Apple computers on or off campus. This custom script is now included on all standard and customized Mac disk images and has been made available to IT liaisons.

Tested beta version of next major release of Microsoft Entourage for Mac.

Configured and documented Apple Mail.

Addressed OS X keychain errors.

Consulted with Arts & Sciences Academic Advising to review AdvisorTrac appointment scheduling software. Coordinated web demo with the software publisher for those interested in this solution.
• Maintained a Support Services presence on Hospital Hill to ensure fast response to computer issues in ILE classrooms.
• Consulted with Chemistry Department to work through infrastructure upgrades and network security concerns to bring in line with UMKCnet computing standards but without negatively impacting teaching and research.
• Provided 23 recycled Optiplex GX280 PCs to replace legacy equipment in teaching and research labs. This ensures continuation of service on computers that can run the most modern, secure version of Windows.
• Joined all Windows PCs to UMKC-USERS domain, allowing for participation in WSUS for periodic and critical OS updates, and in SCCM for automated software deployment and upgrades.
• Standardized on Microsoft Forefront for antivirus and malware protection. This also resulted in cost savings for the department, which had been funding its own antivirus solution.
• Defined server-based print queues for all network printers, and established print quotas for certain lab computers. A&S departments were able to gain some cost savings on printer consumables by metering usage in its larger, general-use labs.
• Created security policies for subgroups of department computers, where needed, and trained department IT liaison to manage the GPOs.
• Migrated data previously shared on unapproved storage devices to IS-hosted servers.
• Demand for GIS (Global Information Systems) and remote sensing tools continues to grow in multiple departments (and schools) at UMKC, especially in three high-use labs for Urban Planning, Economics, and Geosciences. Support Services continues to stay abreast of this emerging technology and has upgraded ArcGIS license servers for two labs to newer hardware in the data center.
• Maintained operations in eight IS-managed general use student computer labs, seven restricted access labs, and supplied one associated classroom. 10,009 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>2,023</td>
</tr>
<tr>
<td>Cherry Street Residence Hall</td>
<td>472</td>
</tr>
<tr>
<td>Health Sciences 3304</td>
<td>1,116</td>
</tr>
<tr>
<td>Miller Nichols 3rd Floor</td>
<td>3,081</td>
</tr>
<tr>
<td>Oak Place Labs</td>
<td>685</td>
</tr>
<tr>
<td>Royall Hall 303, 304, and 314</td>
<td>5,267</td>
</tr>
<tr>
<td>School of Education 129</td>
<td>2,651</td>
</tr>
<tr>
<td>University Center B17</td>
<td>2,200</td>
</tr>
</tbody>
</table>

• Migrated all IS student computing labs to Vista and Office 2007. Trained SAs and began supporting Microsoft Vista.
• Launched updated shift tracking system to streamline staffing of labs and payroll processing.
• Updated furniture in SOE 129 computer lab.
• Tracked 1,682 questions in IS labs, of which 544 were escalated.
• Screened 176 applicants, interviewed 52 prospective new hires, and hired 18 new Student Assistants for IS-managed labs.
• Processed over 6,425 shifts and supervised over 19,644 Student Assistant man-hours. Completed reviews for 59 Student Assistants.
• Supported student printing needs by keeping supplies on hand and printers ready for use. Over 400,000 print jobs were printed in IS-managed general student use computer labs, totaling nearly two and a half million pages.
• Worked closely with UM and Registrar’s office to implement new procedures and train team to support Pathway
• Worked closely with UM and Human Resources office to implement new procedures and train team to support MyHR
• Led and coordinated IT Liaison meetings; presented numerous topics
• Took over backup responsibilities for ISSS servers. Setup backup scripts, scheduled tasks, and server storage for weekly backups.
• Worked with Campus Facilities to analyze space needs and create report for review committee that would consolidate Classroom Technology Services and Support Services office and storage space needs.
• Created or updated deployment packages including:
  o Oracle 10g client
  o RS Means Costworks 2009
  o Cisco IP Phone utilities
  o Office 2007 Service Pack 2
  o Windows Vista Service Pack 2
  o Tegrity
  o eInstruction CPS
  o And many others for the Dental School and the School of Computing and Engineering
• Evaluated the compatibility and performance of the following products:
  o Microsoft Forefront Security client
  o LANDesk suite
  o Citrix XenApps
  o PaperCut MF
  o GoPrint
  o Pharos
  o VMWare ESX
  o Dell Mini-9 Netbook
  o Microsoft Windows 7
  o Google Chrome
  o Microsoft internet Explorer 8
  o System Tamer
  o Windows 2008 Storage Server
• Worked with incoming IT Liaison to upgrade lab facilities
• Met with colleagues at Johnson County Community College to compare notes and experiences with lab support and printing
• Completed migration to Windows Vista in IS Labs
• Made significant progress on using Operating System Deployment (OSD) methods in novel ways to allow for the complete automation of large-scale imaging and post-deployment software installation

• Migrated to paperless FAX in KCUR

• Provided pre-deployment consultation services with departments on various IT projects:
  - Counseling, Health and Testing Center – Adding a web data entry component to Titanium Schedule
  - University Center – Upgrading SchedulerPlus
  - Mail and Addressing Services – Installing a new digital mailing system from Pitney-Bowes

• Created or updated documentation for the following:
  - InfoPrint queue creation process
  - RooPrints environment
  - ISSS server and database infrastructure
  - Flexible Computing overview
  - Clockwatch

• Created, updated and managed disk images for the following:
  - Windows XP universal use
  - Windows Vista universal use
  - Windows Vista for IS Labs
  - Windows Vista for Rural Nursing Initiative
  - Special lab images for BSBPA, Physics, Northland Campus and Athletics
  - Special kiosk images for Student Health and Wellness, International Student Affairs, Registrar's Office and Human Resources

• Provided workstation and network support for UMKC students living on campus

• Developed new webpage to communicate Microsoft’s [Home Use Program] which provides reduced pricing for personal copies of Microsoft software

• Began process of converting web editing software from Expression Web to SharePoint Designer

• Created new web forms and updated old ones to make the online software ordering process easier

• Renewed site licenses for Apple Server Support, AutoCAD, Endnote, KeyServer, Maple, PaperCut, Real Media Server, Respondus, SAS, SPSS, Symantec Ghost, Symantec NetBackup, Tegrity. Saved $3,825 by purchasing Adobe software under CLP contract

• Continued to expand software packages available through SCCM. This system streamlines software delivery over-the-wire and increases everyone’s productivity

• Worked with other campuses to investigate consolidation of Learning Objects contracts

• Represented IS on the Campus Sustainability Committee and continued to work with IS and IT Liaisons to recycle as much packaging (cardboard/Styrofoam) as possible

• Dell purchases totaled nearly $500,000. Apple purchases were nearly $120,000. Peripherals from other vendors totaled just over $30,000. Estimated savings utilizing our contracted and negotiated discounts totaled just over $41,000 during the period.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Cost</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell</td>
<td>$497,467.79</td>
<td>$32,414.00</td>
</tr>
<tr>
<td>Apple</td>
<td>$117,348.85</td>
<td>$7,884.00</td>
</tr>
<tr>
<td>GovConnection</td>
<td>$7,803.39</td>
<td>$858.00</td>
</tr>
</tbody>
</table>

• Of the Dell computer purchases, 420 were Optiplex 760 desktop PCs, two were Optiplex 960s, three were Precision workstations, and 119 were laptops.
• Assisted the Physics department in configuring a laptop for a student summer session and obtained quotes from Chris Fuegner at Dell.

• Assisted Dr. Jo Klaassen with the configuration and purchase of fifty laptops for the Rural Nursing Initiative grant-funded program.

• In July, coordinated the purchase and delivery of 23 Apple desktop and laptop computers, and 38 Dell Latitude laptops and 355 Dell Optiplex desktop computers. This was the implementation of the Workstation Replacement Program that had been postponed in January, due to budget and economic constraints.

• Handled a number of hardware returns. This included laptop batteries, bad external hard drives, failed video cards, and items shipped in error.

• Continued to distribute flyers and handle calls regarding the Dell Employee Purchase Program.

• Assisted in configuring and purchasing hardware for the Chancellor’s new hi-tech Focus Room.

• Completed an MOU with Athletics to support and customize their student computing lab

• Partnered with Networking and Telecommunications to complete an MOU to provide technical support for students residing in Johnson Hall

• Met with various vendors to explore virtualization and “flexible” computing technologies