IT Strategic Plan
Information Technology Division
University of Memphis
FY2014
University of Memphis Strategic Plan: Defining Our Future

Vision
The University of Memphis will be recognized as one of America's great metropolitan research universities, noted for its comprehensive, innovative academic programs and for capitalizing on its urban setting and region to address the challenges of our global society.

Mission
The University of Memphis is a learner-centered metropolitan research university providing high quality educational experiences while pursuing new knowledge through research, artistic expression, and interdisciplinary and engaged scholarship.

Values
The University of Memphis, as an engaged learning community, celebrates:
- The pursuit of excellence in teaching and research as the highest measures of successful achievement.
- Interdisciplinary collaboration, artistic expression, and research as vehicles for leveraging our resources, solving problems, and multiplying our accomplishments.
- The transfer and dissemination of knowledge with community stakeholders for the intellectual, economic, and social advancement of our community.
- Innovation and creativity in everything we do.
- Respect for diversity and individual worth.
- Integrity and transparency in all our actions.
- Responsible stewardship and conservation of resources.
- Stewardship of wisdom, knowledge, and information created by our predecessors.
- Leadership and involvement in the economic, social, and professional growth of Memphis, the state of Tennessee, and the nation.

Strategic Goals

- **Student Success** - Provide distinctive learning experiences that foster lifelong success
- **Research and Creativity** - Cultivate the scholarship of discovery, integration, application, and teaching to advance knowledge and enhance society
- **Access and Diversity** - Promote and sustain an accessible, vibrant community that values diversity
- **Partnerships** - Cultivate relationships which link the mission of the University to external communities
- **Campus Culture and Service Excellence** - Create a campus culture that advances shared governance and sustains and supports operational and service excellence
- **Sense of Place** - Develop an inviting, sustainable campus setting
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IT Overview

The general purpose of the Information Technology Division (ITD) is to improve the quality and cost-effectiveness of higher education at the University of Memphis (UoM) through the use of information technology and to strive to make IT an area of distinction. ITD is entrusted with a fundamental responsibility to provide strategic planning and technical direction in the integration of varied new and existing information technologies, to enrich the communication processes within the institution and to provide leadership in the efficient and effective use of all technological resources.

ITD is more than just technology. Our overall goal is for the UoM community is to view ITD as a partner in the University's success, as a leader in encouraging innovation and improving services while reducing costs, and as colleagues committed to delivering great customer service in everything we do. ITD’s projects and activities support the University’s overall goals of student success, research, and creativity, access and diversity, partnerships, campus culture and service excellence, and fostering a sense of place.

ITD recognizes a common set of strategic directions that serve as the guiding principles by which we serve the university’s six core goals.

Strategic Directions

- Ensure that ITD supports student success, primarily through the provision of the technology infrastructure which sustains effective pedagogy, but also through the provision of self-service and “paperless” management of administrative functions that affect students
- Reinforce a culture of continual skills enhancement within ITD to ensure that everyone effectively contributes as the UoM technical environment evolves to meet changing needs and expectations
- Support business process improvement as a strategic and operational direction
- Continue to support and expand our role as consolidator in provisioning network services in the Mid-South region
- Expand support for research computing/technology to increase funded research
- Develop models for and support of core learning technologies that will enhance teaching, learning, and research through the use of educational technologies.
• Increase collaboration, both formal and informal, between ITD and other functional/administrative areas
• Continuously review the external environment for opportunities to reduce costs, generate revenue, and improve service
• Leverage TBR-wide and state-wide IT resources for UoM advantage, looking for opportunities to generate revenue, reduce costs, and improve services
• Make difficult decisions: stop doing things that don’t move the UoM forward

Assumptions

• ITD will continue to focus on the UoM priorities: student success (recruitment, retention, graduation, and quality), expanding research, and service excellence
• There will be more demand on ITD resources and services to support UoM operations and strategic directions
• The external IT environment will continue to move the UoM toward “cloud-based” functions and services; as such, ITD will increasingly focus on managing services rather than provisioning services
• There will be more collaboration between ITD and functional users to accomplish desired outcomes
• There are currently no anticipated increases to ITD’s funding or staffing, so meeting the UoM IT needs and expectations will require new staff skills, as well as eliminating non-essential functions and services

The UoM will invest in a few selected IT “leading edge” technologies and services in support of institutional strategic goals and initiatives. The UoM will pursue leading edge technologies where there is opportunity for competitive advantage or to implement new processes that reduce the overall costs for the institution. In general, ITD will be an early “mid-adopter” of technologies and services, which are essential in support of UoM operations, both academic and administrative.

ITD Strategic Planning Process

To produce this strategic plan, ITD embarked on a comprehensive data-gathering process that involved soliciting feedback from two distinct groups at the UoM; our IT Governance committees and campus leaders from almost every department, or unit. During the latter part of the Fall Semester and during the first two months of the 2013 Spring semester, the ITD leadership team made over twenty-five site visits to most academic colleges and administrative departments. Before each visit, ITD shared a series of questions. The primary purpose behind each of these individual site visits was to allow each college and department to share both their strategic and tactical IT needs. Next, ITD held a thorough internal SWOT (Strength, Weaknesses, Opportunities and Threats) exercise that helped the division perform a strategic self-assessment. ITD then compiled the site visit data with data from other external IT performance-based survey instruments to help the division form the various components of the IT Strategic Plan. It should be noted that the plan only projects goals and objectives for two years, (ending in FY-15). The intentions behind developing a two-year IT Strategic Plan are as follows: the anticipated leadership changes for the UoM in FY-15, and the rapid advances for the development of IT-related technologies that make forecasting strategic objectives beyond two years almost obsolete.
### ITD SWOT Analysis

#### Internal

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Customer Service – We are highly responsive and work well with campus clients</td>
<td>1. Only “one-deep” for many staff positions within the division</td>
</tr>
<tr>
<td>2. Technical Expertise – Deep technical expertise for a division our size at a medium research institution</td>
<td>2. The lack of true, honest collaboration between ITD units often leads to an “us” versus “them” mental model</td>
</tr>
<tr>
<td>3. Reliability of infrastructure and core enterprise services</td>
<td>3. The division’s poor internal communication processes can lead to a Duplication of Effort (DoE) between various ITD units</td>
</tr>
<tr>
<td>4. With a focus on innovation, one of the most forward-thinking divisions at the UoM</td>
<td>4. The changing requirements of our IT skill sets are not keeping pace with the IT industry</td>
</tr>
<tr>
<td>5. ITD has a decent enterprise-level view of campus operations and promotes IT governance decisions in project resource allocations with campus colleagues</td>
<td></td>
</tr>
</tbody>
</table>

#### External

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ITD can continue to help to support Research efforts (storage, network, computational)</td>
<td>1. Budget – lack of funds available to support the core IT infrastructure (maintenance dollars, TAF vs on-line fees, declining state funding)</td>
</tr>
<tr>
<td>2. Aid in the further development of the BYOD classroom model (network, S/W Anywhere – Anytime, classroom requirements)</td>
<td>2. Other external IT units on campus – (non-ITD units create DoE and often do not share the same strategic or tactical goals)</td>
</tr>
<tr>
<td>3. Continue to explore Cloud-based IT services to reduce costs and improve efficiencies</td>
<td>3. Cloud Services – managing the risks of non-availability of services and evolving the staffs’ skills to work in this new environment</td>
</tr>
<tr>
<td>4. Continue to promote the use of Social Media as an alternative means of communication for the campus</td>
<td>4. MOOCs and EDUs with no borders</td>
</tr>
<tr>
<td>5. Continue to build partnerships</td>
<td>5. Compliance and regulatory activity have substantially increased – ITD resources are often sacrificed for compliancy efforts</td>
</tr>
</tbody>
</table>

#### SWOT Analysis Summary

The Information Technology Division (ITD) is a highly responsive service organization that functions to improve the quality and cost-effectiveness of higher education at the University of Memphis through the use of information technology resources. ITD staffs are extremely proficient employees possessing deep technical skills and enterprise-level operational knowledge; however, the central ITD staffing ranks are thin given the relative size of the University. ITD staffs continuously seek opportunities to align the University’s strategic goals with emerging technologies that help the campus deliver quality educational services. Working within an ever shrinking budget environment, ITD is constantly challenged to find new ways to ensure it maintains the core IT infrastructure. Internal communications continue to be an issue in the division.
Strategic Environmental Opportunities for the University

Throughout the ITD strategic planning process, several consistent issues emerged as strategic opportunities for the UoM. These opportunities were similar for many academic and administrative units, in fact, the number of diverse groups that requested that ITD raise these issues to the top of our strategic planning process seemed to add validity to their inclusion as UoM strategic opportunities. Interestingly enough, a few of the following strategic opportunities only have tangential connections to technology:

- Improvements to the scholarship process should be an institutional priority
- The UoM needs a centralized Statistical Support Unit on campus
- The UoM must have hands-on, or embedded research support personnel to utilize the High-Performance Computing (HPC) environment and to help them with their computational research needs
- Communications about available IT services – the campus community wants to be informed of any additions or improvements to all relevant IT services and systems
- Many areas on campus identified needs for current and future uses of improved video-conferencing capabilities
- Most units on campus expressed concern over the computer replacement cycle and the overall lack of funding sources to support the acquisition of new personal computers

Strategic Focus for ITD (FY-14 – FY-15)

University Goal #1 - Student Success

ITD is committed to ensuring that we help the UoM to expand the use of technology to enhance instruction and learning. With a predominate focus on enhancing the classroom experience, ITD also understands that making technologies available over time and distance is an important requirement from our diverse student population.

Strategic Initiatives for Student Success

Classroom Technologies: ITD will prioritize the investments in standards-based equipment to minimize cost of maintenance and to provide faculty the tools they need to offer better student experiences.

- **Digital Audio/Visual equipment**: To improve the overall classroom experience and to minimize the learning curve for classroom instructors, digital HD A/V components will become part of the classroom standards
- **BYOD Classrooms**: From the pilot BYOD classroom implemented in FY13, the UoM will invest in a BYOD (Bring Your Own Device) computer strategy to enhance engaged teaching and learning. Several classrooms have been identified and are slated to be upgraded to BYOD rooms over the next two years.
• **Software, “Anywhere, Anytime”:** Expand the virtual online software tools to support “anytime/anywhere” access to software for instruction and learning. Currently branded, “UMware”, ITD will move this service from a pilot phase and into a carefully expanded production environment.

**Multimedia Services:** In order to enhance the opportunity for faculty to offer engaging digital learning content, ITD must research, pilot and implement emerging multimedia services.

• **Integrated Digital Media Service:** As a replacement to UoM’s current podcasting service, “Podcast Central,” ITD, in partnership with Academic Affairs, University College and the University Library will look at the implementation of new digital media service.

• **Video Conferencing:** Based on the quality and affordability of emerging systems, ITD will help the UoM meet the needs of offering various video-conferencing solutions to the campus.

**Course Redesign Fellowships (CRF):** ITD will continue to support the CRF as a way to improve low-performing, high enrollment classes. The introduction of new digital tools into the course redesigns, coupled with having the CRF instructor track the course metrics, continue to improve the classroom experience for many students.

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### University Goal #2 – Research and Creativity

Technology plays a critical role in research and innovation across the university. ITD continues our focus on helping university researchers meet their IT needs by engagement, investigation and understanding their research requirements.

**Strategic Initiatives for Research and Creativity**

**High Performance Computing (HPC):** Expand the HPC capacity and external collaboration to allow maximum use by research faculty and students.

**FedEx Institute of Technology (FIT):** Assist the FIT with their equipment upgrades as the Institute enters its second decade of being the campus research hub.

**Research Storage:** In order to accommodate the expanding research storage requirements from the UoM research community, ITD must build and implement a research storage infrastructure that can meet their needs. Research storage capacity will be increased and actively deployed over the next two years.

**Memphis Research Consortium:** In collaboration with Academic Affairs, provide network and computation support for Memphis Research Consortium projects.

**Research Administration:** Dependent on project funding to Research Support, ITD will work with the research administration group to help them to procure and implement a tool to manage the IRB and grants processes for the UoM Research community.
Enterprise Survey Instrument: In collaboration with Academic Affairs, provide the campus with an enterprise survey tool that researchers can be utilized to support their data collection efforts.

University Goal #3 – Access and Diversity

To support the strategy within this goal, maximize access to various university programs, ITD will look to employ a number of emerging technologies. Providing access to university technologies is the core of the ITD service mission.

Strategic Initiatives for Access and Diversity

UoM Mobile App: The development and implementation of the initial mobile app in FY13 gave the campus its first enterprise mobile app. Future development of the app on a new mobile framework will take place in FY-14. ITD will also continue to work with the mobile task force to continuously develop content channels for the UoM mobile app.

MOOCs: Massive Open On-line Courses, or MOOCs have opened access to a new group of motivated learners. ITD will begin working with various campus constituents on the first UoM MOOCs to be developed. To date, the aim of MOOC projects has been to expand the access to educational materials for all who wish to learn while expanding the University’s brand.

University Goal #4 – Partnerships

Continue to leverage corporate partnerships to support student success, faculty research and technology resources. ITD will also leverage regional, state and national partnerships to enhance the visibility, reputation, and resources of the University.

Strategic Initiatives for Partnerships

MCAN - Increase use of the Mid-South Coalition for Advanced Networking (MCAN).

Internet 2 and Net + Services: Leverage the UoM’s Internet 2 connector point to possibly host local and regional institutions to cloud-based services and systems.

University Goal #5 – Service Excellence

As one of the primary service organizations at the university, ITD provides the campus community with core IT infrastructure services to ensure they stay operational, and fulfill their individual missions within the University.

Strategic Initiatives for Service Excellence

Core Business Services: Providing core business services that are essential to the success of the university. These services affect all faculty, staff, and students. By supporting continuous improvement to these services, the UoM will increase productivity and simplify processes.
• **Banner ERP:** ITD will start the evaluation and testing of the new Banner system beginning in FY-14. Upgrades to the new Banner ERP version should help the University to process core business tasks with greater efficiency.

• **Core Infrastructure Services:** Improvements and upgrades to the core infrastructure are constant and necessary maintenance tasks. ITD works to ensure that all non-mandatory upgrades will enhance and improve the user experience with the core service.

• **New Disaster Recovery (DR) Site:** To ensure that all essential IT services are available to the university community, due to an unlikely catastrophic event, DR services are a core component in the IT infrastructure. The UoM will move our existing DR site to a new DR data center in Smyrna, TN during the next calendar year.

• **Regulatory Compliance:** ITD and the campus community will be involved with on-going and new IT-related regulatory projects during the next two years.

• **Business Intelligence (BI) –** Continued support for the BI tool within the Advancement Performance suite from Ellucian.

• **New HelpDesk System:** Work on a replacement HelpDesk system will begin in FY-14. It is anticipated the ITD will look for open-source solutions to reduce the overall project costs.

**Security Initiatives:** IT security and data protection are constantly moving targets in accessing the risk assessments for the University. ITD will help the campus through several security initiatives in the future.

• **Information Protection:** ITD implemented a university-wide information security tool to prevent loss of confidentiality, integrity, or availability of university data, systems and critical business processes. ITD will assist the campus business units to meet these complex regulatory and financial security requirements.

• **Network Access Controller (NAC):** To enhance the protection the university’s IT Commons, ITD will implement the final stage of the NAC project in FY-14.

• **Identity and Access Management:** ITD will increase system security and password synchronization, which will provide enhanced capabilities to connect additional university-wide systems and cloud solutions with a single sign-on.

• **Security Awareness and Training:** ITD will provide security courses for the university community to help the community understand the issues surrounding University data access and use.

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**University Goal #6 – Sense of Place**

Expand the use of technology in community involvement, new construction and renovations of existing structures, classrooms and student activities that develop a physically inviting and sustainable campus.

**Strategic Initiatives for a Sense of Place**

**Lambuth Campus:** As part of the continuous process of integrating the Lambuth campus into our core infrastructure, ITD is involved with all renovations and construction projects.

**Crews Ventures Lab:** The creation and opening of the Crews Ventures Lab in early FY-14 will have critical construction timing issues in order to have the facility operational in FY-14.
Replacement of the A/V in the UC: ITD will be leading the effort to replace the entire Audio/Visual (A/V) infrastructure in the Student UC. The A/V enhancements to UC will improve the quality and experience in using the facility.

Community Health Services Building: Construction will commence on this new facility at the beginning of FY-14. ITD will be involved with several facets of technology during the construction process.

FCBE - Finance Lab – ITD will be assisting the FCBE in the design and implementation of their new finance / trading lab.

ITD Metrics – Measures of Success

Since IT is woven into the fabric of all operational activities at the University, it is often difficult to segregate IT processes, from accompanying business processes. In an attempt to isolate measureable performance metrics, ITD will look at the following IT specific areas:

1) **Maintain the high availability of core services within the ITD infrastructure.**
   - **Measure:** All core services should have an operational up-time of no less 98.5%

2) **IT projects should be completed within a timely manner.**
   - **Measure:** ITD should strive to close at least 60% of all open projects that were begun in the previous FY. *(e.g. if ITD has 100 projects open on 7/1/2013, then it should close at least 60% of those open projects by 7/1/2014). *This would exclude all IT projects that are designated as multi-year projects at the time their creation.*

3) **ITD should ensure that 100% of the active IT governance committees meet regularly.**
   - **Measure:** Each IT governance committee should produce an annual report each calendar year detailing each committee’s work during that year.

4) **ITD should participate in at least one national survey each year that measures the quality of IT services to the campus community.**
   - **Measure:** A summary report with action plans should be shared with campus community each year.

5) **ITD should publish the results of all major activities it encountered in any given year.**
   - **Measure:** ITD will produce an annual report of all major activities at least once a year.
Appendix

A. Summary of Tactical Items or Strategic Projects (by Department)

B. 2012/2013 Techqual+ Summary with Action Plans
Summary of Tactical Objectives or Strategic Projects, by Department/College

(During the ITD Strategic Planning visits, ITD captured most of the meeting notes and compiled them into a set of strategic issues and tactical objectives. The following list details the highlights from those capture tactical objectives.)

Athletics

- Athletics is planning a significant move to South Campus over the next 1-6 years. Most, the offices and buildings will be relocated in a proposed Master Plan. There will be construction of a new basketball facility.
- Move to the Big East and changing conference landscape continue to be an issue for the department.

Cecil C. Humphreys School of Law

- Implementing a new Health Law Program in the future
- Ongoing funding for A/V maintenance in the new building
- Over next two years, would like to build and use online courses in conjunction with Ole Miss and Arkansas law schools

College of Arts and Sciences

- Replacement cycle and funding source for computer replacements
- The UoM needs a centralized Statistical Services Support group on campus
- New Program - PhD in Physics

College of Communication and Fine Arts

- Staying current with the latest hardware and software is crucial meeting for teaching and learning objectives (needs vary by department and are specialized depending on discipline.)
- Improvements and upgrades to Architecture Lab and classrooms over the next two years.
- Architecture Collaboration Studio
- IT technical support is minimal

College of Education, Health and Human Sciences

- The UoM is missing marketing opportunities for our unique on-line programs, like doctoral program in, HE Leadership
- Having the appropriate technology to train teachers with the equipment they will encounter in the classroom. (Example: smartboard access to train future K-12 teachers)

Fogelman College of Business and Economics

- New Finance & Trading Lab
- Will start a new doctorate in Business Administration
- Exploring a "BigData" certificate program for graduate students
- Communications – Keeping the academic community informed of relevant IT services and systems
Graduate School

- The UoM is planning on offering two new Doctorate programs: Doctor of Nursing Practice and a Doctorate in Business Administration
- The UoM needs a comprehensive strategy in dealing with the rise of MOOCs and the potential accompanying transfer credit issues

Herff College of Engineering

- Accreditation milestone (APET?) for the HCE in 2015
- Working on an online Grad certificate program for Engineering
- Communications – Keeping the academic community informed of relevant IT services and systems

Loewenberg School of Nursing

- LSON moving to the new Community Health Building in the next 2-3 years is a priority for the school
- Planning annual nursing enrollment at Lambuth to be 40
- Current and future needs for different types of video conferencing capabilities

School of Communication Sciences and Disorders

- New Community Health Building that CSLD will occupy in the next 2-3 years
- Electronic medical records system – entire process must be HIPAA compliant by 1-15-15

School of Public Health

- SPH is moving to the old Defense Audit building on South campus in the next 2-3 years
- Lack of funding and/or process for computer replacements is top priority for the SPH over the next 3 years.

University College

- The lack of technology fluency by students is still an impediment to the online learning process

Office of the President

- Continued focus on SP process
- Partnership investments
- Honors
- Internships
- Process Improvement
- Retention
- New Markets - (MOOCs)

Legal

- UoM needs a centralized Compliance Office

Advancement

- Replacement cycle and funding source for replacement cycle
- Document Imaging needs and solution for scholarship process
- Current and future needs for different types of video conferencing capabilities
Business and Finance

- University Budget process and appropriate funding
- Richardson Towers project - (building first, then parking garage)
- Highland living facility
- Physical Plant Leadership (interviews currently taking place)

Communications, Public Relations and Marketing

- Development of a Social Media policy during the next year
- Web site re-design initiative until 2014
- Development of an online Media Center to serve as a clearinghouse for official UoM releases

Office of the Provost – (Academic Affairs)

- Retention efforts remain a priority - (focus on advising (UMdegree) and on Study Abroad (Studio Abroad))
- Improvement to the Scholarship process should be institutional priority for the UoM

Student Affairs

- Upgrade of the A/V in the UC
- PCI compliance for all food service vendors
- Richardson Towers construction

Research Support

- Research needs a new Research Administration tool to manage the IRB and grants processing for the UoM Research community
- The UoM must have hands-on, or embedded research personnel to utilized the HPC environment
- Research will hire their first Electronic Research Administrator during the next year
- The UoM needs a centralized Statistical Services Support group on campus

University Libraries

- The process of archiving and digitization of content in the University Libraries is becoming an operational issue
- Integration of library services between Lambuth and the campus is a strategic priority over the next two years

Enrollment Services

- Improvement to the Scholarship process should be institutional priority for the UoM
- Converting the paper-based Financial Aid records to digital records is a priority for Enrollment Services during the next two years
- Personalized digital media services (serve up personalized videos)
KEY FINDINGS AND ACTION PLANS

Assessing IT Service Outcomes: Summary Analysis for the Higher Education TechQual+ Project at the University of Memphis

Information Technology Division
December 2012–January 2013

I believe the single most important technology issue for me in the coming year is learning how to safeguard myself from identity theft as I store more of my information online.

Our Campus WIFI should be consistent through the campus boundaries, not just some buildings.

The iPhone UoM app is a good start but more features and flexibility would improve it.

IT in general doesn’t do a very good job of communicating resources that are available to staff.

Improved video and web-conferencing tools. As an online student, this technology is critical.

The availability of e-textbooks to cut down the extraordinary high cost of books and classroom materials.

With technology changing and increasing each year, will the University of Memphis have the necessary instructors available to keep up with the demands?

-Sample user comments submitted with the TechQual+ survey

TechQual+ Survey

The Higher Education TechQual+ Project provides IT leaders and administrators with the tools to assess, analyze, and report on the effectiveness of technology services at their institution. Based on the findings of focus groups at participating institutions, the TechQual+ project has articulated a set of generalizable IT service outcomes that are typically expected of IT organizations by faculty, students, and staff within higher education. The 2012/2013 TechQual+ core survey contains 13 items designed to measure the performance of the following three core commitments: 1) Connectivity and Access, 2) Technology and Collaboration Services, and 3) Support and Training. The UoM also added two open-ended questions that asked participants to comment on their single most important technology issue for 2013.

Key Findings

- There was an overall improvement in IT service expectations from the 2011-2012 survey. The 2012-2013 survey saw a 22% increase in the number of participants who completed the entire survey.
- The campus wireless network (Wi-Fi) was once again singled out by the user community in their responses as not meeting their performance expectations. (It must be noted that ongoing improvements to the wireless network were still taking place during the 2013 survey period.)
- The user community indicated that core myMemphis portal content should be made available via the UoM mobile app.
In evaluating the detailed responses and comments for some of the more problematic services areas, the responses had more to do with broken or inefficient business processes, rather than direct technology issues. This issue continues from last year’s survey.

Many in the user community felt that there was a lack of responsiveness to submitted technical support requests. They once again desired the timely communications back to them about the updated status of their service requests.

Further analysis of the effectiveness of technology service by distinct groups (students, faculty or staff), yielded the following conclusions:
- Students, as a group, only indicate one area, (wireless service) where their technology service expectations were below their minimum standard. On average, it appears that the students’ IT service expectations were being met.
- Faculty responded that their IT service expectations were below the minimum in only 7 of the 13 core survey questions or areas that they rated.
- Staff responded that their IT service expectations were below the minimum in 3 of the 13 core survey questions or areas that they rated.

Summary Analysis

Respondents

1590 answered one or more of the survey questions with 803 completing the entire survey. One interesting fact that came from the data collection of the survey was a side experiment that was also conducted. During the first four weeks the survey was open, the only notification about the survey came via social media (Twitter and Facebook.) The survey was also located in the announcements section of the myMemphis portal for the entire open survey period. Survey responses were also solicited from traditional group email notifications to students, faculty and staff during the final week of survey data collection. Survey respondents were enticed to participate and were eligible to opt-in at a chance to win one of three prizes drawings.

<table>
<thead>
<tr>
<th>Attribute: University Role (self-reported)</th>
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</thead>
<tbody>
<tr>
<td>Pop (n)</td>
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<tr>
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</tr>
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<tr>
<td>Faculty</td>
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<tr>
<td>Staff</td>
</tr>
<tr>
<td>Student</td>
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<tr>
<td>Totals:</td>
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<table>
<thead>
<tr>
<th>Attribute: Gender (self-reported)</th>
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<tbody>
<tr>
<td>Pop (n)</td>
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<td>---------</td>
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<td>Female</td>
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<tr>
<td>Male</td>
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<tr>
<td>Totals:</td>
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</table>
Survey Results

Zones of Tolerance – This results section shows the relation of our survey respondents (adequacy gap indicated in orange) to predetermined zones of tolerance, (indicated by the grey bars.) The zones show the survey range of minimum to desired and the adequacy gap of minimum to perceived.

Radar Graph – The radar graph shows the perceived to desired and the perceived to minimum ratios:
### Data Table – The rows shaded red indicate a negative service adequacy gap score.

#### Connectivity and Access
Tell us about the quality of the Internet service on campus.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Min</th>
<th>Des</th>
<th>Per</th>
<th>Adeq</th>
<th>Supr</th>
<th>n®</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Having a campus Internet service that is reliable and that operates consistently across campus.</td>
<td>Mean</td>
<td>7.26</td>
<td>8.70</td>
<td>7.42</td>
<td>0.16</td>
<td>1.28</td>
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<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.57</td>
<td>0.75</td>
<td>1.52</td>
<td>1.36</td>
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<tr>
<td>2</td>
<td>Having a campus Internet service that is fast and that provides speedy access to Web sites and rapid downloads.</td>
<td>Mean</td>
<td>7.26</td>
<td>8.70</td>
<td>7.42</td>
<td>0.21</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.52</td>
<td>0.60</td>
<td>1.51</td>
<td>1.32</td>
<td>1.40</td>
</tr>
<tr>
<td>3</td>
<td>Having wireless Internet coverage in all of the places that are important to me on campus.</td>
<td>Mean</td>
<td>7.31</td>
<td>8.55</td>
<td>7.36</td>
<td>0.04</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.69</td>
<td>0.84</td>
<td>1.65</td>
<td>1.73</td>
<td>1.62</td>
</tr>
<tr>
<td>4</td>
<td>Support for accessing the campus Internet service using my tablet or other mobile device.</td>
<td>Mean</td>
<td>7.02</td>
<td>8.44</td>
<td>7.16</td>
<td>0.14</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.78</td>
<td>1.08</td>
<td>1.74</td>
<td>1.06</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Legend: Min = Minimum Level of Service; Des = Desired Level of Service; Per = Perceived Service Quality; Adeq = Adequacy Gap Score (perceived - minimum); Supr = Superiority Gap Score (perceived - desired); n® = Total Respondents Who Completed Item; Mean = Statistical Mean; Dev = Standard Deviation; Red Color = Perceived < Minimum; Green Color = Perceived > Desired; Yellow Color = Potential Problem Areas.

#### Technology and Collaboration Services
Tell us about the quality of Web sites, online services, and technologies for collaboration.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Min</th>
<th>Des</th>
<th>Per</th>
<th>Adeq</th>
<th>Supr</th>
<th>n®</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Having campus Web sites and online services that are easy to use.</td>
<td>Mean</td>
<td>7.23</td>
<td>8.81</td>
<td>7.18</td>
<td>0.08</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.52</td>
<td>0.97</td>
<td>1.51</td>
<td>1.50</td>
<td>1.44</td>
</tr>
<tr>
<td>6</td>
<td>Accessing important campus Web sites and online services from my tablet or other mobile device.</td>
<td>Mean</td>
<td>6.88</td>
<td>8.36</td>
<td>7.07</td>
<td>0.19</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.81</td>
<td>1.19</td>
<td>1.68</td>
<td>1.67</td>
<td>1.60</td>
</tr>
<tr>
<td>7</td>
<td>Having campus technology services available that improve and enhance my collaboration with others.</td>
<td>Mean</td>
<td>6.72</td>
<td>8.20</td>
<td>7.14</td>
<td>0.42</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.87</td>
<td>1.23</td>
<td>1.58</td>
<td>1.44</td>
<td>1.40</td>
</tr>
<tr>
<td>8</td>
<td>Having technology within classrooms or other meeting areas that enhances the presentation and sharing of information.</td>
<td>Mean</td>
<td>7.15</td>
<td>8.45</td>
<td>7.21</td>
<td>0.06</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.71</td>
<td>1.00</td>
<td>1.59</td>
<td>1.62</td>
<td>1.47</td>
</tr>
</tbody>
</table>

Legend: Min = Minimum Level of Service; Des = Desired Level of Service; Per = Perceived Service Quality; Adeq = Adequacy Gap Score (perceived - minimum); Supr = Superiority Gap Score (perceived - desired); n® = Total Respondents Who Completed Item; Mean = Statistical Mean; Dev = Standard Deviation; Red Color = Perceived < Minimum; Green Color = Perceived > Desired; Yellow Color = Potential Problem Areas.

#### Support and Training
Tell us about your experiences when obtaining assistance with technology on campus.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Min</th>
<th>Des</th>
<th>Per</th>
<th>Adeq</th>
<th>Supr</th>
<th>n®</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Technology support staff who are consistently courteous and thoughtful.</td>
<td>Mean</td>
<td>7.41</td>
<td>8.64</td>
<td>7.71</td>
<td>0.31</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.53</td>
<td>0.79</td>
<td>1.40</td>
<td>1.32</td>
<td>1.23</td>
</tr>
<tr>
<td>10</td>
<td>Technology support staff who are knowledgeable and can help me resolve problems with campus technology services.</td>
<td>Mean</td>
<td>7.58</td>
<td>8.67</td>
<td>7.67</td>
<td>0.10</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.46</td>
<td>0.78</td>
<td>1.39</td>
<td>1.30</td>
<td>1.29</td>
</tr>
<tr>
<td>11</td>
<td>Receiving timely resolution to problems that I am experiencing with campus technology services.</td>
<td>Mean</td>
<td>7.59</td>
<td>8.70</td>
<td>7.57</td>
<td>0.02</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.44</td>
<td>0.73</td>
<td>1.47</td>
<td>1.33</td>
<td>1.39</td>
</tr>
<tr>
<td>12</td>
<td>Receiving timely communications regarding campus technology services, explained in a relevant and easy-to-understand form.</td>
<td>Mean</td>
<td>7.19</td>
<td>8.47</td>
<td>7.53</td>
<td>0.34</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.69</td>
<td>0.99</td>
<td>1.45</td>
<td>1.29</td>
<td>1.28</td>
</tr>
<tr>
<td>13</td>
<td>Getting access to training or other self-help information that can enable me to become more effective in my use of campus technology services.</td>
<td>Mean</td>
<td>6.83</td>
<td>8.22</td>
<td>7.02</td>
<td>0.19</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dev</td>
<td>1.77</td>
<td>1.20</td>
<td>1.71</td>
<td>1.59</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Legend: Min = Minimum Level of Service; Des = Desired Level of Service; Per = Perceived Service Quality; Adeq = Adequacy Gap Score (perceived - minimum); Supr = Superiority Gap Score (perceived - desired); n® = Total Respondents Who Completed Item; Mean = Statistical Mean; Dev = Standard Deviation; Red Color = Perceived < Minimum; Green Color = Perceived > Desired; Yellow Color = Potential Problem Areas.
Appendix: Open-Ended Questions – In the 2012/2013 survey the UoM asked three open ended questions. Here is the analysis of the three opened ended questions:

The UoM currently provides each end-user with shareable, personal, web-based file storage. (Currently, called UMdrive.) Going forward, where would you prefer to store and maintain your web-based files?

44% of the respondents indicated that they desired a service similar to UMdrive, while 53% had either no preference, or preferred to choose their own web-based file storage service. (For example, Google Drive, SkyDrive, DropBox, or others similar services.) The features of web-based file storage that the respondents most desired were, web and mobile access, file backups and password protected file sharing.

Which of the following emerging technologies or technology issues do you believe will be important for the UoM in the next 12 months?

The top three emerging technologies that were cited by the respondents: 69% -Mobile access - (via apps, mobile enabled content or shared messaging) – 59% - Software, Anywhere, Anytime - (remote access to software currently provided in the labs) – 58% - E-Textbooks.

What do believe to be the single most important technology issue for you in the coming year?

This question may have produced the most interesting results of the entire survey. The open-ended responses to this question had less to do with wanting different types of technologies at the UoM, and more to do with the individual technology needs of the respondents. Two common concerns were captured in the respondent’s answers to this question: the user community wanted to understand what types of technology are readily available to the campus, and they wanted to ensure high network availability and performance.

The following Wordle tag cloud captures and ranks keywords from these responses:
Comment Analysis and Proposed Action Plans

Appendix: Respondent Suggestions – Each of the thirteen core questions in the 2012/2013 survey allowed for the respondent to provide open-ended comments to each question. Using these responses, a generalized analysis and action plan was constructed for each survey question. Given the similarity of questions and responses, there are instances in the analysis (and subsequent actions plans) where these questions are grouped together. The goal of the summary analysis and the action plans is simple: *The UoM understands the issues that have been raised by our user community and is proactively working to address and resolve these issues.*

Connectivity & Access - Measures service quality of network access and the ability to access online services

(1) Having a campus Internet service that is reliable and that operates consistently across campus.

(2) Having a campus Internet service that is fast and that provides speedy access to Web sites and rapid downloads.

The survey respondents indicated that this service area adequately met their service expectations. These two areas showed a positive improvement over last year’s survey.

Action Plan

Campus Network Improvements

- During the survey period, (late Fall 2012) the final pieces of the Network Access Controller (NAC) were still being implemented. Phase 1 of the NAC implementation has now been completed.
- ITD will physically test all wireless access points on campus to see if there is an unknown anomaly with the wireless network and supporting infrastructure.

(3) Having wireless Internet coverage in all of the places that are important to me on campus.

(4) Support for accessing the campus Internet service using my tablet or other mobile device.

Wireless coverage and service met the respondents’ service expectations. Some users still desired additional wireless coverage and wanted wireless checked in specific locations on campus. For example, during the time the survey was open, wireless coverage for the entire South Campus married student housing facilities had not yet been completed.

Action Plan

Campus Wireless Network

- Phase 2 of the NAC (Network Access Controller) will begin in the summer and be completed by Fall 2013.
- Completion of the new wireless network for South Campus housing was completed in early Spring 2013.
- High capacity wireless access controllers were added to newly constructed BYOD classrooms at the start of the Spring 2013 semester.
- On the ground testing will begin during the Spring 2013 semester to test wireless in every building on campus.
Having campus Web sites and online services that are easy to use.

This was one of two service areas that did not meet the minimum expectations of the respondents. This item fell below service expectations for the following reasons: the UoM rolled out a new responsive web-design at start of the Spring 2013 semester, and the UoM web search capabilities were also cited as not meeting the desired service expectations.

**Action Plan**

**UoM Web Site Performance**

- As mentioned, the new responsive web design was implemented at the start of the Spring 2013 semester. This new web design was simply different and employs a responsive web design which will enable UoM content to be properly displayed over a variety of mobile devices. Continuous development for the UoM’s website will take place during the next 12 months.
- In the summer of 2013, the UoM will procure and implement a new web-based search engine, to improve local web search capabilities.

**Accessing important campus Web sites and online services from my tablet or other mobile device.**

**Having campus technology services available that improve and enhance my collaboration with others.**

**Having technology within classrooms or other meeting areas that enhances the presentation and sharing of information.**

The prevailing comments surrounded having the myMemphis portal content available via a mobile app. Additionally, respondents requested the ability to use newer collaboration tools.

**Action Plan**

**Mobile and Collaboration Services**

- The Mobile Development Task Force (MDTF) group will continue to meet and being to set additional priorities for the current UoM mobile app.
- The UoM mobile web development team is moving to a new mobile app framework during the summer. This new mobile framework will give the UoM greater variety and speed in developing new components.
- The UoM will pilot new desktop video conferencing software during the Summer and Fall 2013 semesters.

**Technology support staff who are consistently courteous and thoughtful.**

**Technology support staff who are knowledgeable and can help me resolve problems with campus technology services.**

Many of the suggestions mentioned the lack of depth of knowledge of the average (student-based) help desk support personnel. Most of these responses also recognized that it is probably unreasonable to expect that entry level support personnel would have the deep skill sets that many faculty and staff might require. Except in a couple of specific instances, respondents showed no distinction between ITD and LSP support personnel.
Action Plan

IT Support

- ITD will continue to work with the Help Desk (HD) staff, LSPs and the ALC to improve support opportunities for our students, faculty and staff.
- ITD will work with other IT support units at the UoM to explore alternative support models.

(11) Getting timely resolutions to problems I am experiencing with technology services at my university

This service issue continues to fall below the minimum service expectation. As indicated in last year’s survey, this service shortcoming is shared by almost every support unit on campus. The respondents desire faster contact and more timely resolutions to issues.

Action Plan

Technology Support Services

- ITD will continue to work with the LSP community to conduct training and to continue the monthly ITD/LSP meetings.
- ITD will work with other divisions, departments and their respective LSPs to review outstanding and non-responsive HD ticket processes.

(12) Receiving timely communications regarding campus technology services, explained in a relevant and easy-to-understand form.

(13) Getting access to training or other self-help information that can enable me to become more effective in my use of campus technology services.

There is a general lack of knowledge of the available training opportunities (faculty / staff.) Communication about available core technologies and services is still lacking.

Action Plan

Communication for Technology Services

- Explore creating a TechBlog or some type of self-service documentation that enables technology content to be easily discovered and utilized.
- Develop a new technology services web design to simplify / streamline access to technology services, whether located in ITD or other units on campus.
- Continue to utilize the TechQual+ survey each year and to publish the survey results with accompanying action plans.
- Share the results of other national technology surveys that ITD participates in with the larger UoM community.