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FISCAL YEAR 2013 IN REVIEW

In May 2012, the LMU’s Board of Trustees approved “Forming Leaders Who Transform the World: Loyola Marymount University Strategic Plan 2012-2020,” which will guide the University’s work over the next decade. Subsequently, all major academic and administrative units on campus began the process of creating unit-level plans in support of the ambitious objectives outlined in the University Strategic Plan.

Creating the Information Technology Services Strategic Plan was a year-long process, and the result is a document that will guide ITS decision-making for the next three years. Three factors informed the creation of the ITS Strategic Plan: 1) a review of external forces in technology and higher education, 2) a comprehensive process of listening to the needs of technology stakeholders across campus, and 3) the University Strategic Plan and other unit plans. In order to listen to technology stakeholders across campus, ITS issued a survey that resulted in approximately 800 responses from students, 250 responses from faculty, and 500 responses from staff. In addition to a careful review of the survey results, leaders from ITS conducted over 20 focus groups with stakeholders to build a more in-depth understanding of the technology needs across campus.

While the entire department was engaged in developing a forward-thinking roadmap, the Academic Technology Services team was celebrating many successful initiatives in support of LMU’s faculty and students. Academic Creative Services, which provides full-service media production resources for LMU faculty and staff for teaching, learning and research purposes, grew at an astounding rate in terms of output and service offerings. Many of these services are detailed in the following pages. In partnership with the Center for Teaching Excellence, University Librarians, the Academic Technology team, and others, the Instructional Technology team successfully ran a series of workshops designed to equip faculty with tools and approaches for integrating blended and fully online strategies into their curricula.

1 http://its.lmu.edu/whoweare/itscommunications/itsstrategicplan/
By the end of Fiscal Year 2013, the Academic Technology Services team had delivered a significant amount of technologies and services to faculty and students, empowering them to reach new heights in teaching, study and scholarship. Likewise against the backdrop of the forward-looking planning efforts, the Enterprise Systems team partnered with support units across campus to implement new and upgraded applications that enabled strategic initiatives. One of the more impressive implementations was a new parking system that is tightly integrated with LMU’s core Enterprise Resource Planning (ERP) systems. This implementation allows for the permit-issuance and payment processes to seamlessly occur. Also impressive was the Office of Admissions’ implementation of a new Constituent Relationship Management (CRM) system that will be the basis for the cultivation and creation of strong classes of students that will define LMU for many years to come.

These achievements would not have been possible without a robust infrastructure at LMU. At the beginning of the 2012-13 academic year, ITS saw a surge in network demand, due to an increase in the number of devices on campus, affecting the speed and availability of network access. In response to the increased demand, the Infrastructure team embarked on a six-month long process of updating the design of LMU’s network and replacing core network components. Thanks to LMU’s excellent IT Infrastructure team, the project’s execution was virtually flawless, with no major unplanned disruptions to ITS services.

FY 2013 was a year of building and planning for Information Technology Services. With a solid infrastructure and technical foundation in place and a roadmap to lead the way, fiscal year 2014 will be focused on providing support to advance the University’s strategic initiatives.
Expansion of Academic Creative Services

Academic Creative Services (ACS) provides full-service media production resources for LMU faculty and staff for teaching, learning and research purposes. This includes services such as filming, editing, podcasting, web, and innovative pedagogical consultation services to improve student learning and faculty outreach and fill the need for media-rich content in the LMU community.

Since its creation in 2011, ACS has continued to expand each year. In FY 2013, ACS reached four major milestones while completing a number of other unique and special projects along the way:

1. **WebEx Conferencing and Collaboration**

   WebEx, a web-conferencing system, was implemented campus-wide after a year-long pilot. This system allows for all faculty and staff to have on-demand online meetings and share content with the ability to record for later viewing. Support for this widely-used service was transferred to Academic Creative Services following the pilot program.

2. **Campus-wide Video Distribution**

   Kaltura, a cloud-based video distribution system, was launched campus-wide in early Spring 2013. This system allows specific LMU departments, such as University Relations, Athletics, and the Library, to maintain individual video libraries and have a common platform to share videos. Kaltura also integrates directly with MYLMU Connect (Blackboard), providing faculty members with the ability to use it in their courses.

3. **Oral Communications Competency Assessment**

   Academic Creative Services worked with the Assessment Office to evaluate students’ oral communication skills. Hundreds of student presentations were filmed in approximately 30 different classes, and transferred to the Assessment Office for coding. This project provided key evidence of LMU students’ competency in oral communications.

4. **Crossing the 200-video Mark**

   Academic Creative Services surpassed the creation of 200 academic videos by the end of fiscal year 2013. Video content includes spotlights on faculty teaching and research, sharing academic concepts, and the marketing of academic programs to the LMU community. With continued excellent production value, ACS has nearly doubled its creation output every semester since its inception in 2011. A full-time staff member was added to the team in late Spring 2013 to help address the growing demand for projects and content.
The Online Teaching and Learning Academy (OTLA) was a fully-online project designed to guide faculty interested in teaching online or hybrid courses. Thirty faculty members participated in the semester-long academy during Spring 2013. While the majority of faculty were from Bellarmine College of Liberal Arts and the School of Education, faculty from every school and college participated, including one from Extension.

The program consisted of six unique modules, each lasting two to three weeks. The modules covered a variety of topics such as: pedagogical considerations and course design, creating instructional materials for digital delivery, communication, assessment, along with social, legal and ethical concerns.

Primarily managed and supported by the Instructional Technology team, OTLA was an opportunity to foster strong collaboration between other units on campus, including the Center for Teaching Excellence, the Library, and Disability Support Services. Faculty found value in OTLA, as one faculty member said in a post-project survey: “As a veteran Online instructor, the workshop showed me new ideas. I know there are many more ideas to learn, so I look forward to phase 2 of OTLA.”

The iPad Exploration Project (iPEP) was a year-long research project that allowed faculty to review, experiment, and share potential uses of the iPad in higher education.

Through face-to-face meetings, one-on-one consultations, and a MYLMU Connect community site, the 27 faculty participants documented their experiences throughout the academic year and learned together. Each member was given an iPad for their participation. The group investigated how the iPad could be used for writing, reading, creating content, research and what impact the iPad (and other tablets) may have on learning.

Twenty faculty projects were completed in video form and are available for viewing through LMU’s iTunes U site. Faculty projects included using an iPad to: film vocal performances, give direct feedback throughout a project, using specific chemistry apps, using software to show images/whiteboard onto the projector in the class, and finding ways to get all students to use their own devices in the production of videos in class.
Teaching with Technology Day

The Center for Teaching Excellence and the Academic Technology team collaborated to host a “Teaching with Technology Day” in January 2013. Along with staff and administrators, over 60 faculty members from all colleges and schools attended the event. In a total of nine separate sessions, 28 faculty speakers shared their experiences with using technology in their teaching. José Antonio Bowen, Ph.D., the author of “Teaching Naked: How Moving Technology Out of Your College Classroom will Improve Student Learning,” opened the event with a webcast keynote speech during lunch. Topics such as blogging, journaling, voice discussion boards, web conferencing, teaching with mobile and tablet devices, pen and screen captures, online and hybrid courses, and data visualization were all addressed. In addition, there were hands-on, walk-up stations where Instructional Technology staff presented various tools and supported faculty in demonstrations.

The sessions were all captured on video by the Academic Creative Services team and are available on the CTE website.

Faculty’s response to the day was simple: “Let’s do this again!”

1 http://josebowen.com/
INFRASTRUCTURE, INFORMATION SECURITY AND COMPLIANCE

Business Continuity in Case of Emergency

Over the past few years, ITS has collaborated with a number of campus departments to identify services and applications that would be essential during cases of prolonged downtime. This business continuity effort led to the creation of a disaster recovery site at University of San Francisco (USF); this remote site allows ITS to make applications such as Banner (student information system), Oracle E-Business Suite (financials), and Microsoft Exchange (email) available during extensive outages. In order to bolster this disaster recovery environment, new hardware was procured in 2013 that enabled ITS to create a more robust, scalable virtual infrastructure at USF. Additional critical applications will be onboarded into this remote site in the next phases of the project.

In order to provide business continuity in additional areas, other essential services were migrated to the cloud during the past year, where they benefit from disaster-proof capabilities. The Blackboard Learning Management System (MYLMU Connect), LMU’s online learning management system, was moved into a hosted environment, as was Terminal 4, the content management system for LMU’s primary website.

Streamlined Credit Card Processing

ITS collaborated with the Business and Finance Division to procure and install approximately 20 Sequoia point-of-sale (POS) devices across campus. The project goals were to replace antiquated dial-up credit card terminals, add basic security to the devices, and streamline the accounting processes associated with the reconciliation of purchases made on these devices. Additional POS devices will be delivered in fiscal year 2014.

In addition to streamlining the POS terminals, an e-Commerce solution was purchased in 2013 to consolidate LMU’s various credit card processing systems, such as PayPal and other third-party vendors. The new solution is easier to administer and reduces the time needed to setup individual department requests. The implementation was completed over Summer 2013, and departments will begin using the new e-Commerce solution in Fall 2013.
INFRASTRUCTURE, INFORMATION SECURITY AND COMPLIANCE

Wired and Wireless Network Upgrade

The first half of the fiscal year saw significant stress on the network as students brought a record number of devices to campus (including smartphones, laptops, and tablets), which contributed to network congestion. In order to meet the growing demands of network usage, a major system upgrade that began during the winter break brought stability and speed back to the entire campus network. Many core network systems were re-architected to provide greater stability and redundancy. The upgrade also increased connection speeds, laid the groundwork for future expansion, and increased Internet security for LMU users. In addition to improvements of all wired and wireless network equipment, hundreds of new wireless access points were added to boost coverage in classrooms, meeting rooms, and student living facilities.

Email Migration to Exchange 2010

In order to improve faculty and staff email availability and redundancy, ITS implemented a major upgrade to its email platform, migrating from Microsoft Exchange 2007 to Microsoft Exchange 2010. Over 4,000 mailboxes were migrated seamlessly with zero downtime. The new version of Exchange offers a revamped database structure, easier administration and better system management, which equals more reliable access for the end user. In addition, Exchange 2010 offers a browser-agnostic web platform, so users who use Firefox, Chrome or Safari can have the same, rich experience as Internet Explorer users. ITS used the Exchange 2010 upgrade as a launching pad to initiate the email disaster recovery system, bringing up partner servers at the University of San Francisco that can be activated in case of emergency.

Virtual Server Environment Upgrade

ITS upgraded to the newest version of its virtualization platform (VMware), allowing the department to build larger, more powerful virtual servers and to provide increased redundancy, security, and stability. The entire physical platform that these servers depend on was also re-architected, allowing for easier expansion and growth for the future.

As early adopters of server virtualization, ITS’ server infrastructure is about 90% virtual, with over 250 virtual production servers and 150 virtual test and development servers. This endeavor allows ITS to expand its servers exponentially, creating many more services and applications efficiently and economically. Virtual servers not only reduce the space required to store hardware, but also reduce expenditures on physical hardware, and the overall environmental footprint of the datacenters.

Data Storage Upgrade

ITS installed a secondary storage device in one of its primary datacenters in order to provide better data protection and redundancy for LMU’s data. Maintaining the integrity of our information, and being able to access it quickly should connectivity issues arise, is essential, and the installation of the new storage device will help to bring downtime to a minimum.
Parking System Implementation

Also in FY 2013, LMU implemented a new parking management system. LMU is an early adopter of this type of system, which features paperless permits. The project has significant impact to the entire LMU community, as the process for obtaining and paying for parking, along with ticketing and enforcement, has changed. As project manager for this implementation, ITS led the process from its inception, ensuring transparency and collaboration with all stakeholders.

The paperless permit parking system features mobile license plate recognition, pay stations, and pay-by-cell-phone systems. The system interacts with payroll deductions for faculty and staff, student account billing, credit card payments and point-of-sale transactions. Parking management software was also implemented to create a central location for all parking-related information.

New Identity Management

The process of provisioning user accounts at LMU—whether a user is full-time, part-time, faculty, staff or student—has become much more efficient and reliable since the installation of Microsoft Forefront Identity Management (FIM).

Thanks to FIM, user accounts are created in much less time than in the previous identity management system. This allows newly-hired staff and faculty the ability to login to LMU systems shortly after being hired, minimizing wait times and improving productivity and data accuracy. The system also manages the influx of over 10,000 prospective student applicants and creates a user account for each one, later converting a portion of them to accepted and admitted students. FIM keeps track of users’ status, helping to adjust a user’s role (e.g., from student to staff), greatly assisting the ITS security team by verifying who is enrolled and/or employed at any given time.


**ENTERPRISE APPLICATIONS AND SOFTWARE**

**Student Health Application Migration**

ITS collaborated with Student Health Services to implement a new student health records system by Point and Click Solutions, a pioneer in electronic records for student health. ITS managed the six-month project, working with the vendor, Student Health Services, and various groups within ITS for a launch in the Fall 2012 semester.

The new solution is tailored specifically for college health care providers and provides a refined patient workflow that significantly reduces the time required to access and maintain patient records. A portal specifically for students helps streamline the patient intake process on both sides of the transaction; students can schedule appointments, communicate with medical providers, and view test results.

**Banner Migration**

Banner, LMU’s student information system, is critical to the operation of the University. Banner’s processes include scheduling classes, admitting and registering students, recording grades, and storing student records, and information from Banner feeds into many other critical systems.

In an effort to streamline Banner, ITS migrated the application to the new virtual platform (x86) using the existing VMware virtual infrastructure. This highly successful migration vastly improved performances, with processes running up to six times faster than the previous platform. The success of this migration was a direct result of the collaboration between ITS and the Banner User Group, comprised of individuals from across campus.
Constituent Relationship Management for Undergraduate Admission

On September 17, 2012, LMU launched the new undergraduate admission system using Microsoft Dynamics and Ellucian Recruiter as the software platform. Collaboration between ITS and LMU Undergraduate Admissions was crucial to select the right Constituent Relationship Management (CRM) product and build an exceptional undergraduate admission environment for applicants.

The new system also allows applicants to communicate with Undergraduate Admissions more efficiently. The CRM enables the creation of dashboards and reports that provide strategic and operational information to Enrollment Management.

As a campus-wide LMU initiative, the undergraduate admissions implementation was the first phase of a complete communication and relationship platform for the University. Future phases of the project will include implementing the CRM for Graduate Admissions, Student Affairs, University Relations, and other units.

Order Procurement Service-Now Implementation

A major achievement for ITS in 2011 was the implementation of a service management tool called Service-Now. Using Service-Now, automated services streamline requests, moving them quickly through the system.

In 2013, the Order Procurement tool was selected as one of the first services to be implemented. This tool expedites the laborious task of ordering computer accessories for both users and ITS personnel.

Using Service-Now, ITS created a service catalog environment that allows LMU’s staff and faculty to request computers and accessories using a user-friendly interface that guides the user step-by-step, automating the entire process from the moment the request is received by ITS to when the item is delivered to the user.
PLANNING AND ARCHITECTURE

Athletics Business Process Improvement

LMU Athletics partnered with ITS to better identify opportunities to increase Athletics’ operational efficiency and reduce organizational costs. The analysis helped the athletic department understand the need to improve department-wide accounting, increase loss prevention, better utilize existing software systems, improve data storage and access, and identify opportunities to automate repetitive manual processes. Ticket sales management is the first of several projects underway that will address some of these concerns.

LMU Enterprise Data Warehouse (EDW) and Operation Data Store

In collaboration with the Office of Strategic Planning & Educational Effectiveness, ITS expanded the enterprise data warehouse by developing the Student Enrollment and Degree Award data collection. This data collection enables the creation of graphical reports to provide strategic and operational information to the Deans, Associate Deans and other decision makers.

Another achievement for ITS and the Decision Support Environment was the completion of the LMU Operation Data Store environment, allowing LMU to eliminate a significant area of technology dependency from a third-party vendor, providing a major cost reduction.

Project Management

Given the variety and complexity of technology projects, the need for a stable and consistent project process has been evident. ITS formalized this support with the creation of the Project Management Office (PMO).

In FY 2013, the PMO redefined what constitutes an ITS project, streamlining the effort and resources needed for operational tasks. By defining a project as a “temporary endeavor undertaken to create or update a unique service or technology,” a more formalized methodology is now in place for true projects in regards to planning, execution, and deployment. These changes improve turnaround time for operational requests and allows the PMO to focus on larger-scale, more strategic requests.

In addition, the PMO established a project onboarding process evaluating the timeline, prioritization, and resource allocation of project requests. This process significantly improves communication with project stakeholders.
BY THE NUMBERS: SUSTAINING CUSTOMER SERVICE

Using the service management system, Service-Now, ITS tracks all requests for support, whether walk-ins, emails, or phone calls. As a whole, ITS responded to over 23,000 incidents in FY 2013, almost a 10% increase from FY 2012.

The Client Services team, which includes both the frontline Help Desk and Field Services, took in nearly 11,000 incidents alone (not including computer replacement cases). Based on the customer responses to incident closure surveys, overall satisfaction on these requests is over 93%.

The University Resource Management Plan (RMP) allows for faculty and staff computers to be refreshed on a regular three- to four-year cycle, to ensure that users have the necessary technology to fulfill their job duties. In FY 2013, nearly 900 RMP computers were installed, migrating users’ data from old to new computers with no data loss. An additional 110 computers were purchased as non-RMP assets. The field services team manages approximately 4,500 technology assets across campus.

The Student Technology Support team manages over 1,000 assets located throughout the University, including the Library, and oversees the Student Help Desk. Over 240 lab computers and 78 classroom computers were replaced during Summer 2012. The Student Help Desk worked with more than 1,300 students, and repaired nearly 300 student computers.

The general technology survey conducted in Fall 2012 showed consistent Help Desk satisfaction rates: faculty satisfaction rose to 77% from 73% (in 2011), and student satisfaction rose to 74% from 69% (in 2011), and staff satisfaction is at 89%.
CONFERENCES AND TRAINING

Conferences

- AJCU Conference of Information Technology Management
- Blackboard World
- CaliBug: California Blackboard User Group
- DET/CHE: Directors of Educational Technology in California Higher Education
- EDUCAUSE Security Professionals Conference
- EduSoCal
- Ellucian Live
- Engage 2012 - NolijWeb User Group
- Gartner Application Architecture, Development & Integration Summit
- Gartner IT Financial, Procurement & Asset Management Summit
- Inspire 2013 – Perceptive Software User Group
- International Association of Information Technology Asset Managers 2012 Annual Conference
- ISTE
- Knowledge13 Service-Now User Conference
- New Media Consortium Summer Conference
- OHUG 2012 Global Conference
- Oracle OpenWorld 2012
- Pink Elephant 2013
- Red Hat Conference
- StarRez Global User Conference
- TouchNet COMTEC 2013 Conference (Commerce and Technology)

Training

- Apple Certified Professionals
- Blackboard Transact Training
- Border Gateway Protocol Training
- Broadcaster Educators Association/National Broadcasters Association
- Certified Software Asset Manager (CSAM)
- Cisco Certified Network Administrator Training
- Cisco Networking Training
- Enterprise Architecture Center of Excellence
- F5 Load Balancer Training
- Microsoft Licensing Training
- Microsoft Forefront Identity Management Training
- NetApp Storage Training
- Project Management Professional Training
- R12.x Oracle HR Self-Services
- SANS 575 Mobile Device Security and Ethical Hacking Training
- Splunk Training
- Universal Service Management

Group Associations

- AJCU Conference on Information Technology Management
- EDUCAUSE
- EDUCAUSE Center for Applied Research
- EDUCAUSE Learning Initiative
- EduSoCal: Southern California Educational Technology Conference
- Lions Pride Toastmasters
- Los Angeles Oracle User Group
- New Media Consortium (NMC): Sparking Innovative Learning and Creativity
- Quality Matters: A National Benchmark for Online Courses
- Southern California Banner Interest Group