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INNOVATION

The Information Technology Services team, guided by the leadership team I am fortunate to accompany, recently finished affirming five core values that guide the actions of all team members in our department. The values are: “Service,” “Innovation,” “Integrity,” “Communication,” and “Teamwork.” I would like to share some thoughts on innovation before reflecting how much of the work in which ITS and partners across campus endeavored during Fiscal Year 2016 were indeed carried out in the spirit of innovation.

Rather than innovation being the sole purview of Google, Amazon, Apple, and other large software and high-technology companies, innovation can be affected each and every day by every member of the LMU community. As defined by Merriam-Webster, innovation is “the act or process of introducing new ideas, devices, or methods,” and I see innovation occurring daily at all levels of the Information Technology Services organization. Indeed, we fully embrace within the ITS organization an idea that Chris Lowney, in “Heroic Leadership”, proffers: “everyone leads, and everyone is leading all of the time.”

Innovation is why the Infrastructure and Academic Technology Services team at LMU introduced, with the help of this year’s Barbara Bonney award winner Janet Lee, to LMU a far more robust way of editing, storing, accessing, and collaborating on files. Recently, a colleague shared with me that the adoption of Box for her was “life changing.” Innovation is why so many from the geographically-separated Westchester and Loyola Law School campuses have developed far more efficient ways of supporting IT for the Loyola Law School campus. Innovation is what drove the Infrastructure and Enterprise Applications teams to begin a pilot project to use Amazon Web Services as a foundational component of LMU’s Disaster Recovery solution. Innovation is what has compelled the faculty, in partnership with Academic Technology Services, to select a new Learning Management System that will be piloted this Fall.

The above examples of innovation-fueled IT accomplishments that LMU can claim during Fiscal Year 2016 only scratch the surface, and I am grateful for the patience that the LMU community demonstrates and for the trust it confers on Information Technology Services. I hope you enjoy the Fiscal Year 2016 IT Annual Report.

Patrick Frontiera
Vice President,
Information Technology Services
Classroom Upgrades

During this fiscal year, the Classroom & Creative Services team installed or upgraded 49 learning spaces with new audio-visual equipment and other technology upgrades. A major focus for the AV team was the Life Sciences Building, which includes 19 AV equipped science teaching labs, a high-end active learning classroom, and a 270+ seat auditorium. In addition to the Life Sciences Building, the AV in 19 classrooms in University Hall, two rooms in the William H. Hannon Library, two rooms in Hilton, and one room in the Burns Fine Arts Center were also fully upgraded. In addition, Classroom & Creative Services worked with faculty in the Engineering, Animation, Biology, Physics, Economics, MBA, Archeology, and Recording Arts departments to upgrade the computers in their computer labs and student work spaces. Finally, based on student and faculty feedback from the Learning Space Furniture Showcase held in Spring 2015, easy-to-move desks were added to nine classrooms on the third floor of University Hall. Student and faculty feedback to the new design of these classrooms has been extremely positive.

2016 Harman Innovation Award for Active Learning Space

The design of the active learning spaces in the Life Science Building did not go unnoticed. Shortly after the end of FY 2016, LMU was awarded the 2016 Harman Innovation Award in the Active Learning Space category. This award came with a $25,000 in-kind award, which will go toward creating additional active learning spaces across campus.

“What we have now far surpasses what we had envisioned more than 8 years ago when we started this project. Your partnership during the critical last years was instrumental in the success. I am always grateful for your collaboration and “can do” approach of your team.”

– Tina Choe, PhD
Dean of Frank R. Seaver College of Science and Engineering
College Technology Showcase:
College of Business Administration

This academic year, the Instructional Technology team piloted an outreach program to target each college and school to expand their knowledge of a variety of teaching with technology techniques and tools. The pilot event took place in the College of Business on February 16, 2016, and provided faculty an engaging presentation and discussion on presentation tools, 3D printing, polling tools, video conferencing, and classroom capture. The well-attended event (38 participants) was carefully crafted based on faculty feedback from the Fall semester. Because of its success, similar custom-tailed events are expected to be planned in the remaining colleges/schools in the 2016-2017 academic year.

Technology Enhanced Learning
Implementation Group (TELIG)-related Events

In support and coordination of the Special Assistant to the Provost for Technology-Enhanced learning, nine Technology Enhanced Learning events took place over the 2015-16 academic year. The first, Technology Enhanced Online/Hybrid Workshop series, was a week-long series of workshops co-hosted by the Academic Technology team and the Center for Teaching Excellence and featured presentations by three guest speakers, seven Instructional Technologists and Designers, and the director of the Center for Teaching Excellence. It was attended by 16 faculty from all colleges and schools who learned about communication, engagement, motivational and other differences in online and hybrid education. ITS Academic Technology also co-hosted four hands-on workshops with faculty from three different colleges and schools (Nicholas Denysenko, Silvie Grote, Evelyn McDonnell, and Elizabeth Reilly), demonstrating ways to use particular technologies (Echo360, WebEx, Adobe Premiere Clip, and Digital Journaling) in online and hybrid courses.
Data Center Upgrade

The upkeep and maintenance of data centers is essential for a healthy and flexible environment, allowing applications and services to have greater uptime and availability. Last year, ITS completed the construction of a new, state-of-the-art data center in the P1 parking complex, creating greater stability and reliability for all LMU-hosted systems. The year-long endeavor included a close partnership with Facilities Management, and allowed ITS to begin decommissioning older, satellite data centers on campus, removing the need to upgrade older equipment and rooms. Consolidating efforts into a room built with redundancy in mind, coupled with remote and cloud-based locations, the new data center will provide LMU with the ability to provide a secure, stable computing environment for years to come.

Network Upgrades

Fulfilling the ever-growing needs of the LMU community for faster and additional wireless services, ITS continued the expansion of the wireless and wired networks, pushing into new territories and improving existing areas. Newer WiFi access points were installed not only in several residence halls throughout campus, but also in the Jesuit residence and in various staff/faculty offices to provide better coverage. In response to specific requests to provide coverage to non-residential areas, ITS also turned its focus during this past year on other campus locations to increase WiFi access and collaboration, including newly-created study areas in University Hall, coffee and dining areas in Malone, and outdoor areas such as Sunken Gardens. Further, working with the Athletics Department, a large WiFi project was also undertaken to provide wireless access in Gersten Pavilion, an endeavor that proved successful in providing excellent WiFi service to basketball game attendees.
Advanced Persistent Threat Implementation

In January 2016, the Information Security team and Network Services installed a network security appliance from FireEye that uses network behavior rather than known signatures to identify and block malware. The purpose of this appliance is to protect LMU from zero-day malware—malicious software programs that have no known signatures created to allow anti-malware software to block it. In addition to zero-day malware blocking, FireEye blocks ransomware, a type of malware that encrypts the files on a person’s computer and holds the encryption key for ransom. Though LMU has only received a handful of these types of malware over the last few years, FireEye blocked a pending ransomware infection 6 weeks after deployment. No ransomware infections have taken place on the Westchester campus since the implementation of FireEye. This appliance is currently only available on the Westchester campus, however, plans to implement at the Law School are pending.

Database Encryption

As part of our security strategy, all databases that include SSNs, Driver’s Licenses, and credit cards will encrypt this type of data. This past year, we were able to encrypt this type of data in our Student Information, Human Resources, Financial, and Payroll systems.

LawRoom Security Training Roll-Out

The Information Security team, in coordination with Human Resources, rolled out a Data Security training course in HR’s training system, Law Room in January. The course was initially sent out to departments with any role or responsibility for handling personal financial information or credit card transactions, ultimately being sent to 440 users. This training rollout further emphasizes our commitment to protecting personal information as well as being compliant with the Gramm Leach Bliley Act (GLBA) as well as Payment Card Industry Data Security Standards (PCI-DSS).
The Community of Care program helps students overcome obstacles that prevent academic and personal success. As an essential tool, the Community of Care CRM enables the Dean of Students’ Office to effectively manage outreach, coordination, and follow-up with students. The Dean of Students’ Office could not have a stronger partner than ITS in developing the technological infrastructure for this program.”

– Jeanne Ortiz
Dean of Students
Student Engagement Technology using OrgSync

In September 2015, LMU launched the new Student Engagement System using OrgSync, a cloud computing platform. The collaboration between ITS and the office of Student Leadership & Development was crucial to select the right product and build an adequate platform that allows students to easily find involvement opportunities and build connections with other students on campus.

The new system enables students to interact and communicate amongst themselves and with the office of Student Leadership & Development more efficiently. At the same time, the new system streamlines student and administrative processes, program and event planning and organization. OrgSync will also permit the creation of reports that will provide tactical and operational information to the office of Student Leadership & Development.

With the infrastructure and tools now in place, Student Affairs has established the foundation for building additional subject-specific implementations to provide better interaction with LMU's constituencies.

Phase 1 of DegreeWorks implementation

In addition to having developed systems that help LMU best provision support for students of concern, the Office of the Registrar, in partnership with ITS and other academic units on campus, is in the process of implementing a fully web-based, user-friendly system that will empower each LMU student to better navigate his or her academic course of study while at LMU. Students commonly ask such questions as: “What if I want to change my major?” or “What if I want to add a minor?” The current systems in place, originally implemented in 1999, make such questions difficult for a student to answer without assistance from an adviser. The Office of the Registrar projects that, upon full implementation of the new DegreeWorks software, students and their faculty advisers will be able to more quickly and accurately answer these questions. While providing insights into these commonly asked questions, the DegreeWorks software will also enable students to map out their entire academic journey while at LMU. Empowered by these insights and this knowledge, LMU will increase the chances of more students graduating within a given timeframe. The DegreeWorks software will replace an existing degree audit program and will follow a refresh of key parts of the Banner student information system, which was originally implemented in 1999. We expect that this software will go live in the summer of 2017.
Integration of Loyola Law School ITD

LMU ITS integrated non-academic technology services of the Loyola Law School IT department this past year, enabling closer collaboration between the campuses and paving the way for future inter-campus growth and advancement. Throughout the year, responsibility for Infrastructure Services were migrated to LMU ITS. In January 2015, ITS assumed responsibility for the LLS server environment, followed in June by Client Services (help desk, desktop support), and in November, all network and security responsibilities were assumed by ITS. Application Infrastructure services were also migrated to LMU ITS, beginning in January 2016. A variety of upgrades, patches, and updates were applied to law school application infrastructure to ensure a smooth transition, improve and maintain the law school’s infrastructure architecture, and transfer knowledge between law school and ITS staff.

To continue moving toward a single source of truth for technology assets, the law school identity management system was integrated with the system in use on the Westchester campus. This unified approach to identity management allowed most LLS users to reduce from multiple usernames and passwords to a single login. Another main project that LMU ITS shared with LLS was the Post Banner Customization project, a collection of efforts supporting the LLS Banner migration project, including LLS exam administration and book store integration.

So far, the integrated partnership has allowed both campuses to collectively plan for future upgrades, share applications and technology, and benefit from shared services.
conferences and training

- Adobe Education Train the Trainer: Creative Cloud trainer credential
- Adobe MAX
- AJCU Conference of Information Technology Management
- AMX Training/Certification
- Bb World
- CCNA
- Cisco Training
- CiscoLive Conference
- Computer Users in Education
- Directors of Educational Technology/California Higher Education (DET/CHE)
- Echo360 Active Learning Conference
- Educause
- Educause Learning Initiative
- Educause Learning Initiative Course: Making Learning Spaces Work
- Ellucian Live! 2016
- Inspire (Nolij) 2016

- Internet2 Shibboleth Workshop
- Internet2 Technology Exchange
- Microsoft Certified Systems Engineer 2012
- NAB
- New Media Consortium
- OAUG Conference 2016
- OHUG Global Conference 2016
- Online Learning Consortium Conference
- Quality Matters APPQMR Training
- Quality Matters FacetoFace Facilitator Training
- Red Hat Summit
- SANS SEC504: Hacker Tools, Techniques, Exploits and Incident Handling
- Knowledge (ServiceNow Conference)
- QA Analyst training
- Global Knowledge PMP®
- Enterprise Dataversity
- TDWI conference