

## Instructional & Information Technology Services

### Annual Report, AY 2015/16

#### Progress Report on AY 2015/16 Goals

##### • **Technology as a Key Component for Innovative Instruction**

- **Windows 10 upgrade:** With the assistance of a \$50,000 grant from Microsoft, IITS initiated a review of client management solutions and pursued a strategy to improve the Windows management system (SCCM). This allowed us to deploy Windows 10 to over 1,000 PCs, resulting in substantial improvement in the time needed to update campus computer labs and classrooms.
- **Improved CougarApps:** IITS completed a hardware refresh of the CougarApps environment without user impact or downtime for the campus. The new hardware has increased application performance and provided flexibility to deploy newer operating systems and resources into CougarApps.
- **Classroom Technology:** IITS deployed upgraded display systems in over 50 classrooms. The new HD projectors provide crisper and brighter images, enhancing our ability to provide visual course content. We are currently working with faculty to evaluate wireless presentation and whiteboard technologies with iPads and multi-platform projection devices.
- **Faculty Training:** Instructional Development Services hosted two faculty training programs during the academic year with twelve participants at TULIP and nineteen attending Flipped Camp.

##### • **Mobile First Strategy**

- **Introduction of Campus Mobile App:** IITS launched the first CSUSM Mobile App in collaboration with Office of Communications. The first release included student orientation schedules and resources, dining services and hours, an interactive campus map, featured events, real-time computer lab availability, a searchable directory, along with campus news and social media feeds. IITS partnered with the Campus Bookstore to pilot proximity sensing beacons that are paired with the CSUSM app to send pop-up notifications when the mobile device is in close range.
- **Responsive Website:** The campus homepage and second level pages were converted to a mobile-first design that will serve phones, tablets, and desktop visitors with optimized views. By the end of summer 2016, the entire campus website will receive this responsive design framework.
- **Lab Computer Availability:** IITS deployed LabStats, a new monitoring system that reports the number of open lab computers by location. LabStats is integrated into the campus app.
- **Improved Wireless Coverage:** In April the campus reached its peak wireless usage, with over 11,700 simultaneous connections. Responding to the ever-growing demand for wireless access around campus, IITS funded and implemented an upgrade and expansion of the campus' outdoor wireless coverage. The project cleaned up the visual blight of the older units and provides far better service and coverage to students. Upgraded

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infrastructure now provides access in public locations such as the USU and Dome that were previously underserved or had poor connectivity.

- **Technology Support to the Campus Community**
  - **Online Course Reviews:** In support of the Quality Online Learning & Teaching (QOLT) program, IDS staff reviewed 24 courses. This peer-review process provides feedback and recognition for high quality online courses.
  - **Improved Student Printing:** Academic labs have an improved service for students with Paw Print. Students are now able to print from any personal device in addition to campus labs. Paw Print has processed \$64,154.00 in credit card transactions and \$43,484.00 in cash.
  - **Upgraded Student Study Rooms:** Through a project to upgrade conference room displays to 4k high definition, IITS repurposed and redeployed 15 units into student study rooms in the Kellogg Library in order to facilitate work by collaborative student teams.
  - **Improved Asset Tracking:** Our asset tracking database continues to evolve, and processes are being improved to keep the information updated in real-time. The refresh computer delivery tagging and verification has been reduced from several days to one-day, enabling computer deployment to begin sooner. The time to complete the majority of the refreshes has been reduced from the full year to about 6 months. Processes are also in place to manage the IITS inventory and reduce the risk of missing assets. Reliable reports are now available to show progress in projects or determine the needs of future projects.
  
- **Data Driven Decision Making**
  - **Degree Planner:** Partnering with multiple units on campus, the Degree Planner is used by students and advisors to map out their 4-year degree plan. The system was fully implemented in AY 2015-2016 with 100% of the primary state-side majors (81) requiring 304 requirements groups and 100% of the primary state-side minors (38). Data generated from Degree Planner will assist in identifying course demand over multiple academic years with the goal of leveraging that data for enrollment management purposes to improve time to graduation by removing the barrier of course need.
  - **Data & Analytics:** Working in conjunction with Institutional Planning & Analysis (IP&A), IITS developed over 30 PeopleSoft queries and reports to support student success initiatives, HR management, degree planning, and student records.
  - **Tableau Dashboards:** IITS partnered with IP&A to pursue the development of Tableau dashboards. This was identified as a top IITS priority. We visited Fresno State to evaluate their implementation and subsequently contracted with Fresno State for professional services to assist CSUSM in developing our own dashboards. Consulting effort resulted in improving campus expertise in Tableau development and led to quicker, more robust campus built dashboards.

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- **Cloud Computing and Online Services**
  - **Thin Client Proof of Concept:** IITS developed and deployed a 20 seat Thin Client pilot project in order to test the feasibility of replacing certain types of campus desktops with a workstation client. Thin clients provide the functionality of a windows desktop by using server based computer resources, and can be deployed in a matter of minutes.
  - **Data Feeds:** IITS developed and maintained upwards of 20 data feeds to integrate campus community information with third party hosted solutions including Accudemia, AIMS Parking, InnoSoft Fusion (Campus Recreation and Athletics management software), and JumpForward (NCAA compliance software).
  - **System Redundancy & Cloud Computing:** This year IITS initiated efforts to move key services to the cloud for operational redundancy. To accomplish this we engaged Microsoft in an Azure cloud solution that is currently going into production.
  - **Improved Identity & Access Management:** Staff pursued an extensive review of the business processes used to support our identity management system that provision employees, students, and temporary users. We have begun investigating the feasibility of replacing the current in-house solution with Microsoft's Azure Active Directory Premium service.
  - **Service Status Notification:** In Spring 2015, IITS implemented new internal service interruption notification protocols and updates to the Executive Council and Deans. We also initiated a public systems status page at [status.csusm.edu](http://status.csusm.edu); a cloud-based hosted service.
  
- **University Wide Opportunities**
  - **Affordable Textbooks:** Through a partnership of CSUSM faculty, CSU Chancellor's Office, Library, and IITS, the CALM program continues to build savings for students through the use of Open Educational Resources. In the current academic year the savings are estimated to be approximately \$827,000, with a program total over three years of \$1.5 million. Through new funding in support of AB 786, an additional 50 course sections will have their textbook cost significantly lowered or eliminated in the coming academic year. Efforts were funded by a \$23,000 grant from the CSU.
  - **Athletics Sports Center:** IITS staff collaborated with Athletics to help design and install Audio Visual equipment in the new arena, in addition to providing funding support for display systems.
  - **OnBase Electronic Workflow & Document Management:** IITS rolled out a Contract Management solution for Procurement that improved efficiency by providing an online form for entering contract data, online tools to manage contracts, and provides accuracy in data by leveraging PeopleSoft. Working with Enrollment Management Services, IITS implemented Transcript Capture Processing which allows EMS to automatically index transcripts with data leveraged from PeopleSoft and update the student's checklist within PeopleSoft. IITS also developed a new work flow process that works with any online form; a process that is similar to a paid add-on used at Cal Poly Pomona.

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- **Graduation Live Stream:** IITS continued to support the campus' live streaming of graduation this year with the addition of a new perspective provided by a steady cam operated by IITS staff. The camera was able to walk with students and capture up close and live images of student celebrations. Live stream statistics from all graduations found that just over 1,900 unique views occurred over the two days of graduation events.
- **Automated Operator:** Callers are now able to use an automated system to ask for a department or name and be transferred to their published extension. This is a substantial benefit to persons who call during time periods where there are no operators, in addition to providing an improved method for directory search.
- **New Reservation/Scheduling System:** IITS deployed a new reservation/scheduling system, Accudemia, to over 15 centers. Over 9400 students have utilized Accudemia to work with these centers for a total of over 49,000 visits.
- **Event Support:** Media Production Services provided event production support for over 65 campus events and 92 production sessions during the academic year.
- **Media Distribution:** The updated Mediasite service, used for hosting campus video service, supported over 63,000 hours of viewing of over 6,700 unique presentations.
- **System and Government Regulatory Compliance**
  - **PeopleSoft Retooling:** IITS partnered with Sierra Cedar (technical consultants), Extended Learning, Enrollment Management Services, and Student Financial Services to implement a \$1.4-million-dollar project to retool PeopleSoft in order to meet unique academic program needs and regulatory/compliance functions. IITS also administered upgrades including PeopleTools upgrade to 8.54.09, Oracle upgrade to 12c, 19 maintenance packs, and 48 bolt-on customizations or modifications, including significant enhancements to support Orientation workshop enrollment and Extended Learning applications and admissions processing (AASO).
  - **PeopleSoft Security - Student Application Re-Design:** A major accomplishment for this year included the implementation of the new security roles for PeopleSoft, specific to the student application. Increased automation of campus user account management allows for the streamlined creation of new users accounts. The new streamlined process automatically assigns the pre-approved roles based on the person's job classification. The new security model is a sustainable model that will speed provisioning of new staff and ensure that the campus community has the proper access to student records. The testing and rollout is planned for completion in summer 2016.
  - **Border Firewall Upgrade:** This year our border firewall was upgraded to a new next-generation firewall as part of the CSU CNI program. We also began implementing a micro-segmentation network design in our data center that allows for greatly increased security and higher fault tolerance for critical systems.
  - **Single Sign-on (SSO) and Software-as-a-Service:** The number of requests for SSO access is steadily increasing. Since January 2015, there were 16 implementations completed. In addition, work was done with the colleges and administrative units to inventory current

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- hosted and software-as-a-service (SaaS) applications. Both of these projects will continue into next year in order to provide the needed upgrades to the SSO infrastructure and guidance to departments as they try to meet rapidly changing service requirements.
- **Security Awareness & Training:** This year we participated in the nationwide “National Cybersecurity Awareness Month” by publishing weekly articles for the campus. Additionally we used the “Phishme” service provided by the Chancellor’s Office to evaluate campus employee response to Phishing messages.
  - **Identity Finder:** Identity Finder is a product deployed by the Information Security team to locate the presence of personal identity information. This year we completed evaluation of campus department shares for storage of Protected Level 1 Data. Work is ongoing to encrypt and secure files in order to reduce overall risk to the campus.
  - **Data Classification Survey:** The Information Security team revised and deployed the annual data classification survey. This effort is required in order to evaluate and address information risk and areas for increased monitoring.
  - **HIPAA Review for Student Health Center:** IITS developed a HIPAA risk management review process for the Student Health Center in order to validate compliance with Federal Law.
  - **Accessible Content:** The ATI Steering Committee met on a semi-annual basis to begin discussing accessibility issues in various campus areas and potential solutions. Currently, we are in the process of moving all campus webpages to a new mobile-friendly and accessible template and have begun monitoring accessibility of all site pages on a monthly basis.