LAFAYETTE COLLEGE

Information Technology Services | Annual Report | SUMMER 2013

TABLE OF CONTENTS

VIEW ONLINE

ITS.lafayette.edu/annualreport

Letter *from the* CIO

Implementation of the College's IT Master Plan entered its second year this year, with many of the planned initiatives now coming alive. We introduced a new teaching with technology grant program, developed a process improvement service, as well as completed the first phase of our Unified Communications project. This year's annual report provides more details about these exciting projects.

"I'd like to thank the Board, Cabinet, and President Weiss for all of their support this past year."

A significant industry trend this year, known as Big Data, centers around the notion that properly maintained data assets can be leveraged for more meaningful system integration, reporting, analytics, and assessments. Much of the technology world in 2013 has been focused on this topic and its application in business and technology platforms. From Google to Facebook, Big Data is driving technology sector revenue as well as the growth of cloud-based services. In response to this growing movement in the field of technology we are creating a new department in ITS. Enterprise Data Management and Systems (EDMS) will establish a campus-wide data management service to coordinate and maintain the College's data assets. Effectively managed institutional data will create new opportunities for more engagement with faculty, students, and staff, as well as alumni and prospects. There is much to be gained by a properly managed and maintained institutional data store, and we are just now beginning to put the pieces in place.

Another major theme this year involved integrating technology into learning spaces across campus. Whether in the Oechsle Center for Global Education, the Williams Arts Campus, or the first phase of our smart classroom redesign project, technology integration plays a major role in how these spaces enable new innovations in pedagogy.

I'd like to thank the Board, Cabinet, and President Weiss for all of their support this past year. Aligning technology initiatives to the strategic goals of the College has been difficult but rewarding work. I'm excited about the new perspectives President Byerly brings and the enormous potential we have before us to fuel technology innovation with creative thinking.

John O'Keefe

Develop Capabilities

that support faculty teaching and research and student learning

THIS YEAR, ITS began a new program in partnership with the IT and Library Faculty Committee to award grants to faculty who wish to integrate technology in their teaching. The grants are intended to encourage and financially support full-time members of the faculty who are interested in exploring new ways of improving their teaching through innovative pedagogical strategies augmented with technology. This initiative is part of the IT Master Plan adopted in March 2012, and provides resources and support for the exploration of ideas that are relatively small in scale. If a project proves to be successful, ITS can increase staff support and financial resources enabling more faculty to pursue similar technologies and approaches. Support and guidance for grant recipients will be given by an instructional technologist who is paired with the faculty member. This pairing is intended to provide consultation and training for the faculty member as needed.

Proposals were received from 10 faculty, and seven grants were awarded to support myriad disciplines including Art, Chemistry, Chemical and Biomolecular Engineering, and Psychology. Proposals included innovative uses for iPads in the classroom, 3-D printing capabilities, student response systems, exploring flipped classroom approaches, and visualization techniques. The successful applicants will create a post-award report by the end of August 2014 detailing ways in which the project improved or did not improve one's teaching, ways in which the project could be improved, possible next steps, and ways in which the grant application process could be improved. Selected applicants may also be asked to describe their projects as part of a one-hour program for the Center for the Integration of Teaching, Learning, and Scholarship (CITLS) in the early to middle part of the Fall 2014 semester.

ADDITIONAL ACCOMPLISHMENTS IN THIS STRATEGIC AREA INCLUDE:

- Transition to Qualtrics Research Suite for data collection and analysis
- Designing and implementing the first phase of smart classroom upgrades in Van Wickle, Kunkel, and Oechsle
- Completing a Faculty Support Study to assess Faculty support needs
- Supporting the Metzgar Fields wind and solar project

WordPress

650 personal, organizational, and club **web sites** are *hosted* by LAFAYETTE'S WordPress instance

240 ACADEMIC and PUBLIC LAB SYSTEMS were ***upgraded***

250+ HOURS of HD **video conferencing** were *spent* in LVAIC Italian COURSES

Support the Creation

of and access to digital assets and data

DURING THE COURSE OF THIS YEAR a major strategic area of growth has been the increasing dependence on data, reporting, and analytics. Whether part of an administrative office business process or academic assessment and outcomes, Lafayette has not been immune to national trends in Data Management.

Today, Lafayette has a highly distributed and decentralized data stewardship and ownership model: our data assets are not managed with a view to the needs of the College as a whole. We need more effective management of our institutional data assets to better inform our decisions, make stronger connections to assessments and outcomes, and enable the complex integration many of our systems now demand. As a result, we have begun the first significant restructuring of ITS under my direction.

Using a combination of existing staff, a new hire funded by operating budget reductions, and defining a new support relationship with our community, we are transforming Administrative Information Systems (AIS) to a new group called Enterprise Data Management and Systems (EDMS). While much of the work done by EDMS will be very similar to what AIS does today, the group will now be responsible for institutional data management. EDMS will allow the College to operationalize data management activities with a horizontal, institutional view. Concentrating existing and new resources toward this effort will enable us to assign a data management liaison to each of the six primary functional areas in Banner.

In addition to establishing this new department within ITS, we are also leading other initiatives to help mitigate this issue, including establishing a shared governance process for managing data assets and developing a College policy to ensure that institutional data collection occurs in a central repository. We are also developing training to enable effective data collection and maintenance.

ADDITIONAL ACCOMPLISHMENTS IN THIS STRATEGIC AREA INCLUDE:

- Migrating file services from Novell to Samba
- Completing a soft launch of Lafayette's portal — my.lafayette.edu
- Implementing a new electronic medical records system
- Creating an archive of scanned, mission-critical documents for Development

Over **247** HOURS have been *spent* on planned **maintenance activities**

There were **35** ***new*** INITIATIVE PROJECT REQUESTS this year

SQUARE FEET of **roll paper** were *printed* on the ITS **WIDE-FORMAT PRINTER**

Promote the Efficient Use

of technology through community partnership

BEHIND EVERY RACE CAR DRIVER is a team, commonly called the pit crew, that assesses the status of the car and makes adjustments to enable success. Similarly, ITS has created a cross-divisional group called the Process Improvement Team — the PIT Crew. The team analyzes office workflows and implements more efficient uses of technology within a department. This new IT service is an initiative of the IT Master Plan, now in its second year of implementation.

The PIT Crew's first partner was Development and College Relations. A hybrid framework based on LEAN and ITIL methodologies was developed to guide the PIT Crew members through a process that identifies and improves areas of technology related inefficiencies. This leads to managing and measuring proposed process improvements over time.

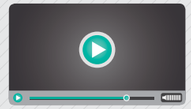
The PIT Crew selected three processes that could be improved in a six-month timeframe. The selection criteria focused on topics that would have an immediate positive impact on the College's upcoming capital campaign. The processes chosen after review were creating an electronic imaging standard for all legal documents; creating a Development-specific technology training and resource site; and gift officer travel-report creation. The existing report process required repetitive editing and review by numerous staff. By developing a new standards-based web interface, the planned changes will streamline tasks for gift officers, support staff, and department leaders while providing department leaders with more timely and relevant reports.

The PIT Crew experience has been mutually beneficial to Development and ITS. The cyclical nature of process improvement continues to identify and improve the use of technology for that division. As we grow this service, we plan to assemble PIT Crews for other departments within the College, enabling more departments to achieve a higher level of IT efficiency in their work.

5,824 **tickets** were *received* at the HELP DESK

3,417 were *resolved* at LEVEL 1

2,407 were *resolved* by ITS STAFF

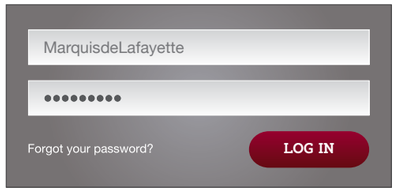


MEDIASPACE, the College's web-based video service, *logged* **8,226** MINUTES of **viewed content**

650 HOURS of **lynda.com** content have been ***viewed***

ADDITIONAL ACCOMPLISHMENTS IN THIS STRATEGIC AREA INCLUDE:

- Developing an IT service catalog for the ITS web site
- Completing the IT security strategy
- Implementing a web-based new-hire workflow for Human Resources
- Developing a new Network ID account process for Class of 2017



Support Communication and Collaboration

between and among the College and members of its community

THE COLLEGE'S PHONE SYSTEM, installed in the early 1990s, had become very difficult to maintain. Finding replacement parts and technicians who could help repair the system was a challenge, so the system needed to be replaced. ITS took the opportunity not just to swap out an old system with a new one, but rather to think more broadly about how faculty, students, and staff want to communicate and collaborate in the 21st century.

We identified a new technology to fill this need. Unified Communications, or UC, is what it sounds like: unifying multiple communication mediums under one platform. UC, unlike basic Voice over IP (VoIP), includes video calling, chat, presence, voicemail to email, and integration with other systems. After an in-depth research and RFP process, we selected eZuce as our UC platform. This open-source but corporate-backed solution has enabled us to modify and customize the user experience as well as develop multiple integration points with other systems. The pilot included over 150 faculty, staff, and students using both traditional desk phones as well as software-based phones. Students and faculty used software-based phones to collaborate as part of the writing assistants program.

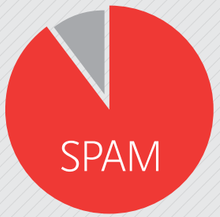
The project has already saved the College $10,000 annually on electricity when parts of the old system were replaced by virtual servers running in our data centers. We anticipate additional savings once the remaining components of the old system are shut down.

As implementation began, a partnership to develop custom code was formed among Computer Science, ITS, and a student from the Class of 2013. The resulting work was incorporated in to the eZuce software, making it available to other customers. We see great promise in this model of collaboration around open-source applications, creating hands-on experience for students in partnership with academic departments.

Visits to the Lafayette WEBSITE are ***up*** 44%

Mobile device views of the WEBSITE are ***up*** 108%

Tablet views ***up*** 181%



We ***receive*** on average **338,078** EMAIL MESSAGES a day: **303,393** are *identified* as SPAM and **blocked**

qualtrics

19,332 RESPONSES have been *collected* in **118 Qualtrics surveys**

ADDITIONAL ACCOMPLISHMENTS IN THIS STRATEGIC AREA INCLUDE:

- Implementing an online Degree Audit application integrated with Banner
- Implementing a web-based alumni fundraising volunteer support application
- Conducting a campus-wide review and selection of a Customer Relationship Management (CRM) system
- Creating a Student Technology Advisory Group in partnership with Student Government

Budget Summary

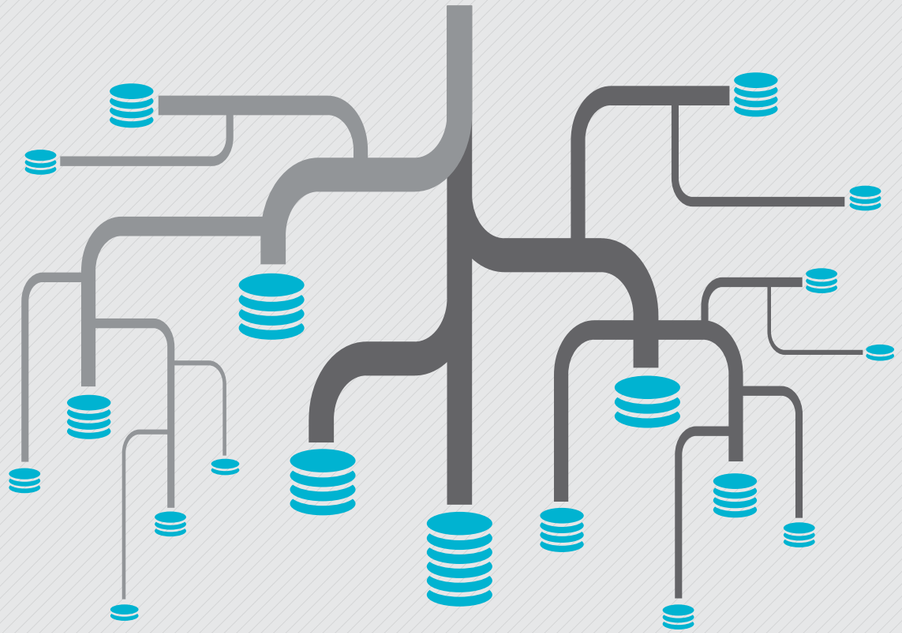
This year we saved ***$21,000*** *by replacing Novell with Samba, an open-source file service application.*

FISCAL YEAR 2012-13 concluded in excellent shape managing both operating and capital budgets on or under budget. Since we now have a clearer delineation between these two accounts with three years of historical data, we can perform more in-depth analyses, identifying trends and patterns in IT spending. This will help the College understand more clearly how our costs are changing over time, leading to better predictive budget models in future years.

While we continue to manage flat operating and capital budgets we are still advancing many of the IT Master Plan initiatives as well as supporting new ambitions of the College. This has been possible through significant operating budget savings realized by our continued use of open-source software. This year we saved $21,000 by replacing Novell with Samba, an open-source file service application. We have also been aggressive in re-negotiating hardware and software maintenance contracts as well as other annual obligations such as Internet bandwidth costs and professional organization membership fees. These reductions have enabled us to add a new position to support our data management initiative.

In addition to more effective stewardship of our operating budget, management of our capital budget has greatly improved thanks to the new IT governance process. This process has added transparency and community participation to project prioritization and funding allocation this year. We received 35 project requests and through the new process recommended 8 for funding. While our budget from FY 2012-13 remained flat for 2013-14 College-wide IT projects, we were able to advance several major initiatives for next year.

Our SERVER CLUSTERS *span* 18 physical servers to *provide* a combined resource with 1.5 terabytes of RAM and 100 terabytes of storage to host 218 virtual machines



This year 4,368 PAYMENTS have been *made* using our new **online e-commerce application** for a total of $26,966,257.69

219 APPLICATIONS have been *packaged* and *installed* using our **desktop management infrastructure**

Major Initiatives *for 2013-14*

ITS continues to play a significant role in the College's strategic direction. Now in the second year of the IT Master Plan, there are several key initiatives slated for the year ahead including website redesign preparation, CRM implementation, and planning the expansion of Instructional Technology. We are also eager to begin working with faculty who received inaugural teaching with technology grants for this academic year.

This summer ITS will establish a new service point in the lower level of Pardee Hall adjacent to the teaching lab in room 028. We hope to use this space to provide in-person consultation, one-on-one training, basic troubleshooting, and other drop-in services.

A NUMBER OF MAJOR PROJECTS WILL CONCLUDE THIS COMING YEAR. THEY INCLUDE:

- Completing Phase 1 of Lafayette's Portal, **my.lafayette.edu**
- Implementing an online, web-based Housing Information Management System
- Deploying a print-management solution
- Connecting the College to a new high-speed research network, KINBER

IN ADDITION, SEVERAL MULTI-YEAR PROJECTS WILL CONTINUE IN 2013-14, INCLUDING:

- Redesigning our fleet of smart classrooms
- Converting more faculty, staff, and students to our new Unified Communications platform
- Designing technology integration for the Williams Arts Campus and Oechsle Center for Global Education
- Beginning Phase 2 of the portal project
- Establishing the parameters for the web redesign project to be undertaken in 2014-15

***FOR MORE INFORMATION** about the IT Master Plan and other IT projects, visit the IT website at **its.lafayette.edu**.*

Who We Are

Information Technology Services (ITS) develops capabilities that support faculty teaching, research, and student learning; supports the creation of and access to digital assets and data; promotes the efficient use of technology through community partnership; and supports communication and collaboration between and among the College and members of its community. In addition, ITS is responsible for overseeing Lafayette's academic and administrative systems and the robust information technology infrastructure that supports them.

Heavily invested in the open-source model for application development and support, staff often contribute code and other enhancements to the developer community at-large. Building and maintaining open and standards-based systems has been a cornerstone of our approach to providing IT services to the College community. Highlights this year include developing new features and bug fixes for Moodle, releasing our Moodle theme (known as "Cosmic") to the public, and fixing code developed by Yale University and used in Financial Aid's IDOC process. IT staff also remain actively engaged in the broader IT community, presenting and publishing various works at eZuce CoLab, RedHat Summit, and LANDesk Interchange among others.

This year we added two new FTE to the Division, bringing our staff count to 34: Katherine Butler, Director of IT Planning, Analysis and Communications, and Renee Scholtz, Enterprise Application Programmer/Analyst. Two new positions are budgeted for next year: User Services Specialist (already filled by new full-time staff member Bill Yox) and another Enterprise Application Programmer/Analyst to support the College's Data Management initiative.

ITS is comprised of six departments: Office of the CIO, Administrative Information Systems, Instructional Technology, Network and Systems, User Services, and Web Application Development.

OFFICE OF THE CIO

The Office of the CIO is responsible for the strategic leadership of the Division of ITS. With a staff of three, this group also manages IT planning, analysis, communications, portfolio and project management, long-term planning, procurement, and other administrative support functions for the Division.

ADMINISTRATIVE INFORMATION SERVICES (AIS)

With a staff of six, Administrative Information Services maintains the College's ERP system (Banner) and supports all administrators, faculty, and students in its use. Our Banner environment consists of the Internet Native Banner (INB) suite and full complement of Banner Self-Service and WorkFlow products. As extensions to our Banner environment, AIS supports applications used for reporting, degree audit management for faculty and students, electronic student refunding and an e-commerce marketplace, document imaging and management, and specialized electronic form development and deployment. A host of auxiliary business systems is supported jointly by AIS and Systems, including applications for event scheduling, recreation center management, dining services, Counseling Center management, judicial management, alumni volunteer fund raising management, and electronic medical records management for the Health Center and sports medicine.

INSTRUCTIONAL TECHNOLOGY

Instructional Technology supports the training and use of technology by faculty, students, and staff with three instructional technologists, an arts campus technology coordinator, a systems engineer, and systems specialist. These staff instruct faculty and students in the use of technology for teaching, learning, and research. The group supports the classroom and lab facilities required to teach classes, maintaining presentation technology installed in nearly 100 locations throughout 18 buildings. Instructional Technology offers individualized training on classroom technology operation, consultation on presentation technology purchases and installations, and operational support for the College's videoconferencing room.

NETWORK AND SYSTEMS

With a staff of nine, Network and Systems maintains and extends the College's digital infrastructure across two data centers. This infrastructure includes a robust virtualized network with a 10Gb backbone, 1Gb connectivity to the desktop, two geographically diverse Internet connections, and a connection to Internet2, a high-speed research network for higher education. The staff also maintains the wireless network available in all campus buildings. Network and Systems manages a virtual server infrastructure, storage systems, the Zimbra collaboration suite, file services, the Network ID identity management system, and other core applications. The group also develops programs to integrate and automate management of campus systems.

USER SERVICES

With a staff of seven, User Services supports the use of technology by all faculty, students, and staff. The team maintains three general-use public labs as well as a student-run hardware repair shop. The help desk is also managed through User Services. The team manages both Windows and Macintosh computers configured with a standard set of licensed applications for both administrative and academic uses. In addition, the User Services staff provides support for numerous hosted services. User Services also provides technical consultation on the selection and purchase of technology for all College constituencies.

WEB APPLICATIONS DEVELOPMENT

With a staff of three, Web Applications Development supports, develops, and maintains the College's web applications and services. This includes Moodle (our learning management system), WordPress (our content management system), and Drupal (our web application engine used to power the calendar, directory, and other web-based applications). The group evaluates new web technologies, integrates disparate web applications, and conducts usability testing of new and existing websites. The developers work closely with the Communications Division to maintain public facing websites, with Instructional Technology to provide training and support for College web applications, and with Network and Systems to maintain the server infrastructure.

LAFAYETTE
COLLEGE

INFORMATION TECHNOLOGY SERVICES | Skillman Library | Easton, PA 18042 | 610.330.5803 | ITS.lafayette.edu