UL Lafayette IT Strategic Plan, 2015-2020

Mission Statement

It is our mission to implement, monitor, manage, and maintain information technology resources (such as the campus data network, telephone system, computer systems, computer labs, and servers) at the University of Louisiana at Lafayette in support of the primary University functions of instruction, research, and public service. Additionally, we offer centralized support, training, and consulting services related to the technology provided to our campus community.

The Office of Information Technology is one of the primary divisions at the University of Louisiana at Lafayette reporting to the Vice President for Administration and Finance. Its' more than 60 employees in four departments include programmers, systems analysts, consultants, system and network administrators, operators, security professionals, and service support personnel.

Vision

UL Lafayette will have an open, secure, integrated, and state-of-the-art Information Technology environment. It will be supported by an accessible, adaptable, reliable and sustainable infrastructure and services that support excellence in teaching, research, scholarship, and public service.

Strategic Goals and Objectives

Goal I: Talent Management	Goal II: Technology Enhanced Academic and Support Facilities	Goal III: Service Management	Goal IV: Information Technology Infrastructure	Goal V: Information Technology Governance
Work with Human Resources to develop processes and procedures designed to attract, develop, motivate, and retain well-trained, productive, and engaged information technology staff.	Provide the University teaching, learning and research community with the facilities, technologies, resources, and administrative solutions necessary for recognition as an eminent major research university.	Create, develop, deploy and manage meaningful enterprise services that produce business value that matters.	Establish a sustainable, scalable, secure, robust, and reliable Information Technology infrastructure that enables a positive and consistent technology experience for all users.	Develop information technology policies, procedures, and practices that efficiently and effectively manage Information Technology assets and meet the technology needs, goals, and objectives of the university.

Principles that Guide Action

Technology services will support and encourage teaching, learning, research, and interdisciplinary collaboration	Technology choices will be packaged and consist of all the necessary elements for the adoption and best use of the service, including training, support, appropriate funding, and accessibility	Technology choices will favor solutions offered that are standards-based, requirements-driven, sustainable, robust, and if mission-critical, redundant and resilient	Technology choices will leverage the overall buying power of the University and will work together to limit duplicative or outdated services so that investments can be redirected toward new technology needs	Systems will make their data available for other processes whenever possible, while respecting limits required for personal privacy, regulatory compliance, and Information Technology security

University Strategic Plan

Student experience as it contributes to academic success

Faculty resources to facilitate teaching, research and service

Research resources that support cutting-edge research and insightful scholarship

Governance structure that will improve the capacity for prioritization of academic services of University

Source: University of Louisiana at Lafayette 2015- 2020 IT Strategic Plan

Information Technology

Strategic Plan

2015 – 2020

Updated: September, 22 2016

University of Louisiana at Lafayette
Information Technology Strategic Plan
2015 -2020

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Guiding Principles

The following principles will guide the pursuit of this strategic plan:

- Technology services will support and encourage teaching, learning, research, and interdisciplinary collaboration;
- Technology choices will be packaged and consist of all the necessary elements for the adoption and best use of the service, including training, support, appropriate funding, and accessibility;
- Technology choices will favor solutions offered that are standards-based, requirements-driven, sustainable, robust, and if mission-critical, redundant and resilient;
- Technology choices will leverage the overall buying power of the University and will work together to limit duplicative or outdated services so that investments can be redirected toward new technology needs;
- Systems will make their data available for other processes whenever possible, while respecting limits required for personal privacy, regulatory compliance, and Information Technology security.

Supporting Documents

Other Strategic Plans and documents that influence, guide, or link to the IT Strategic Plan:

The University Strategic Plan can be found at: http://www.louisiana.edu/strategicplan and consists of four primary strategic imperatives:

- **Strategic Imperative Related to Faculty** - Create a stimulating academic environment supported by the latest innovations in technology and informed by best practices, in which faculty members can realize their full potential as educators and scholars.

- **Strategic Imperative Related to <u>Students</u>** - Cultivate a student body that is intellectually curious and civically engaged by developing an infrastructure that ensures student success.
- **Strategic Imperative Related to <u>Research</u>** - Foster a stimulating academic environment for all members of the university community that supports the development and advancement of knowledge and creative works.
- **Strategic Imperative Related to <u>Governance</u>** - Institute a system for shared governance based on trust, collaboration, and continuous improvement.

Student Technology Enhancement Program Plan
http://cio.louisiana.edu/sites/cio.louisiana.edu/files/step_plan.pdf

Board of Regents Master Plan for Public Postsecondary Education in Louisiana
http://www.regents.la.gov/page/master-plan

University of Louisiana at Lafayette WISE Strategic Plan
http://www.ulsystem.edu/assets/docs/searchable/ULL%20WISE%20Presentation%2010.14.pdf

University of Louisiana at Lafayette Economic Impact Study
http://louisiana.edu/sites/louisiana/files/UL-Lafayette_Full-Report.pdf

University of Louisiana System Economic Impact Study
http://www.ulsystem.net/assets/images/impact/uls_report_415.pdf

OIT Mission – The Office of Information Technology (OIT) is UL Lafayette's central technology organization, providing computing, communications, and data services, and consulting with UL Lafayette faculty/staff/students on technology. OIT is responsible for planning and management of the transmission and utilization of data, voice, and video, in support of the university's academic and administrative goals. OIT promotes best practices, efficient procurement, and overall cost-effectiveness in the use of IT resources across the entire University.

OIT Vision – The Office of Information Technology, with partners on and off campus, plan, implement, deploy and use technology to provide the most cost-effective services and solutions to the UL Lafayette community and our UL System partners. Innovative use of technology in instruction is central to the future of higher education.

Organization
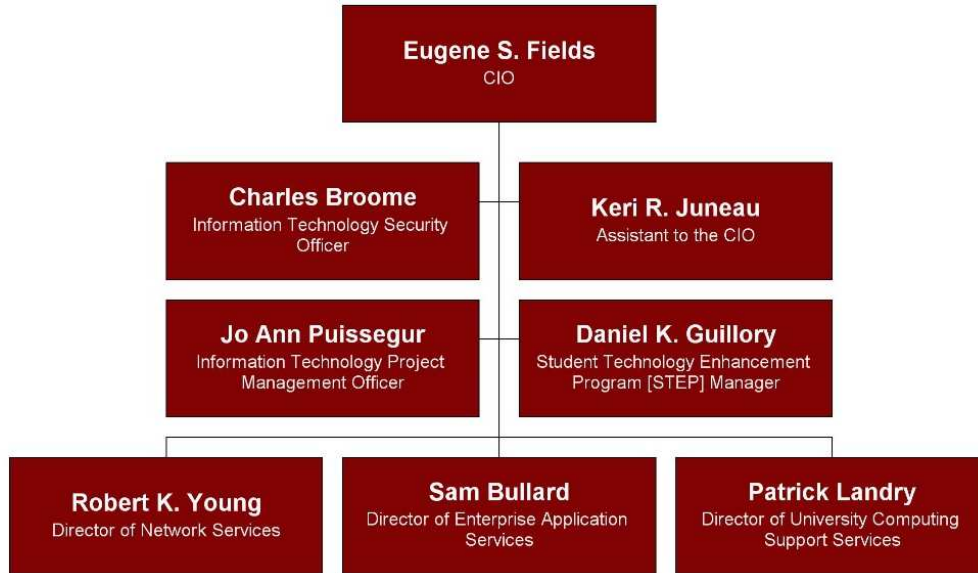
Governance
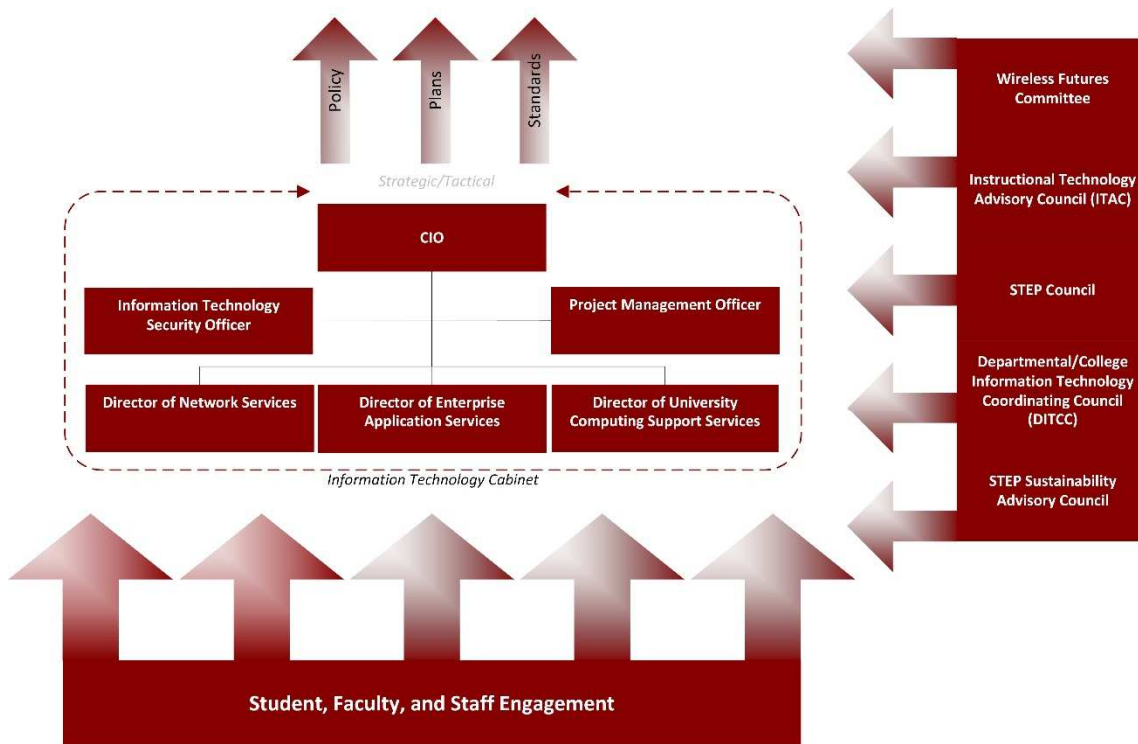
UL Lafayette Information Technology Governance Structure

Planning Environment

Strengths:

- Standards-based desktop computing environment;
- Strong Desktop Support Model (including support and management of nine [9] open-use computer laboratories for students);
- Excellent Service Desk/customer service;
- Initiated and started construction on a second "data center" at Abdalla Hall;
- Well managed (STEP) SMART Classroom/TEC Room program (105 deployed rooms);
- Comprehensive information technology security strategy, services and program;
- Recent investments in network infrastructure including multiple Internet connections for resiliency;
- Over 85 percent of campus already has enterprise Wifi;
- Broad and well publicized technology catalog of services;
- Significant software availability for students in STEP Labs;

Weaknesses:

- Lack of redundancy in enterprise application services;
- Aging centralized data (Stephens Hall) center;
- Service level agreements/objectives for key information technology services;
- Additional granularity in available information technology service packages;
- Technology training and development for information technology service staff;
- Failure to educate community on the importance of technology infrastructure in delivering quality instruction and research services to students, faculty and staff;
- Application development resources;

Opportunities:

- Development of premium services and associated revenue streams to sustain those services;
- Continued support of growing business intelligence community on campus;
- Economies of scale;
- Recent investments in fiber plant to effectuate increased connectivity on campus;

Threats:

- Exponential increase in bandwidth requirements for students, faculty and staff;
- Lack of technology training and knowledge across the enterprise;
- Unclear career pathways for new and existing employees;
- BYOD (Bring your own device);
- Hostile security environment;
- Financial constraints;

Goal I: Talent Management – *Work with Human Resources to develop processes and procedures designed to attract, develop, motivate, and retain well-trained, productive, and engaged information technology staff.*

In order to best serve the University, Information Technology wishes to create a high-performance, sustainable organization that meets or exceeds industry best practice.

Strategic Initiatives:

1. Promote and encourage staff to actively participate in local, state, national and international conferences and organizations focused on higher education information technology, embracing opportunities to showcase success stories, best practices, and to partner with other institutions on technology solutions;
2. Evaluate Information Technology job classifications and update job descriptions to more accurately reflect jobs in the organization.
3. Create and maintain appropriate career paths for IT staff;
4. Identify budgetary resources to support an Information Technology professional development fund.

Success will be measured by:

- Number and frequency of professional development opportunities attended by staff;
- Job Satisfaction;
- Promotions based on defined credentialing/tracks;
- Central IT training and professional development spending per central IT staff FTE;

Links:

- **University Strategic Plan, Governance, SI 3:** Develop the Human Resources function in support of the Mission and Vision.
- **University Strategic Plan, Governance, SI 4:** Establish a process for continuous academic and nonacademic professional development.
- **University Strategic Plan, Faculty, SI 4:** Provide professional development.
- **University Strategic Plan, Research, SI 1:** Enhance supporting infrastructure for the conduct of research and innovation.

Goal II: Technology Enhanced Academic and Support Facilities - *Provide the University teaching, learning and research community with the facilities, technologies, resources, and administrative solutions necessary for recognition as an eminent major research university.*

Create a stimulating academic environment supported by the latest innovations in technology and informed by best practice, in which faculty members can realize their full potential as educators and scholars.

Strategic Initiatives:

1. Build-out, deploy, and expand the high speed science DMZ to enhance research collaborations in Louisiana and with our peers across the nation;
2. Develop a process to prioritize, provide, and fund connectivity to academic (teaching and research) buildings on campus that require access to the LONI HPC environment;
3. Work with Research Office to build a Consolidated Research IT Infrastructure on campus consisting of a shared, co-located data center; a hosted, scalable, server environment; a pooled/shared IT human resources; a shared research IT governance model; and a shared technical knowledgebase and collaborative efforts to enhance/expand IT research expertise;
4. Revise the STEP Plan to align with an increased emphasis on SMART Classrooms and TEC rooms;
5. Work with Network Services and STEP Support to create a more granular approach to deploying SMART Classrooms and TEC rooms;
6. Explore and redefine STEP's role in funding of SMART classrooms and TEC rooms on campus;
7. Work with STEP (OSS) to include a palette of undergraduate research employment opportunities for students;
8. Work with the Instructional Technology Advisory Council [ITAC], Academic Affairs, and other stakeholders to plan and update technologies in all of the classrooms and laboratories on campus;
9. Provide technology to support and improve the teaching and learning experience for our students, faculty and staff;
10. Advance the academic mission of the University through innovative and effective technologies, resources, and services;
11. Coordinate and expand the research support community across the university, providing support that goes beyond narrow technical issues and complements domain-specific expertise with knowledge of best practices and available resources;
12. Transform areas that provide technology support for research into a unified, national leader in research computing, supporting a full-university research infrastructure;
13. Coordinate with the initiative #1 above (funding model) to ensure research services are compatible with researcher funding;
14. Create useful and intuitive workflows, along with supporting technology, that cover the life cycle of research data from creation to publication and preservation.

Success will be measured by:

•   Science DMZ buildings/connections/ports on campus;

- Internal and external traffic/bandwidth use of the Science DMZ;
- Number and percentage of classroom and laboratory space that have internet access, computer, and projection/sound capabilities.

Links:

- **University Strategic Plan, Faculty, SI 1:** Significantly upgrade academic facilities related to instruction in order to meet or exceed the quality of those at peer institutions.
- **University Strategic Plan, Research, SI 1:** Enhance supporting infrastructure for the conduct of research and innovation.

Goal III: Service Management - *Create, develop, deploy and manage meaningful enterprise services that produce business value that matters*

There is clear demand for Information Technology to be competitive, cost-effective, current and excel at the delivery of enterprise services and support. Information Technology needs to be agile and deliver value to the UL community by focusing on commoditizing those services that are not unique, and in turn ensuring those services that are specialized be delivered via qualified and capable resources. The Information Technology Division has a role to package enterprise services in a way to benefit and bring value to the UL community.

Strategic Initiatives:

1. Information Technology will provide an exemplary customer service focus and experience in all service delivery;
2. Implement, advance, and progress an institutionally shared information technology service management system including an issue tracking system with routing and local management;
3. Continue to improve and expand asset management, software distribution, patch management, and remote assistance solutions for the University community;
4. Continue to develop, maintain, and expand software deployment and associated desktop computing services.

Success will be measured by:

- Customer Satisfaction;
- Percentage of service incidents with first call resolution;
- Incident time to resolution;
- Incidents resolved within 24 hours;
- Service escalation;
- Incident/ticket abandonment rate;
- Service level objectives and attainment;
- Self-service support utilization;
- Central IT FTEs per 1,000 institutional FTEs (faculty/staff/students).

Links:

- **University Strategic Plan, Faculty, SI 2:** Expand faculty staffing to meet or exceed peer standards for student to faculty ratios, choices of course offerings, and faculty diversity.
- **University Strategic Plan, Students, SI 1:** Recruit, retain, and graduate outstanding students (undergraduate and graduate; traditional and nontraditional; transfer and returning adults).
- **University Strategic Plan, Students, SI 3:** Increase student productivity and success through engagement in mentored research, innovative projects, and creative endeavors.
- **University Strategic Plan, Governance, SI 1:** Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and aligns all stakeholders to the Vision and Mission.

- **University Strategic Plan, Governance, SI 2:** Provide each level of governance with data analytics capabilities that create a collaborative culture and increase the University's overall impact.
- **University Strategic Plan, Governance SI 4:** Establish a process for continuous academic and nonacademic professional development.

Goal IV: Information Technology Infrastructure - *Establish a sustainable, scalable, secure, robust, and reliable Information Technology infrastructure that enables a positive and consistent technology experience for all users.*

Provide Access to Excellent Infrastructure: Deliver highly functional, reliable and invisible infrastructure that just works—and doesn't get in the way.

The University of Louisiana at Lafayette should build and maintain a sound, advanced, secure, and productive physical information technology infrastructure (including but not limited to facilities, hardware, networks, and software) capable of supporting broad and effective use by students, faculty, and staff throughout the institution, including remote university members such as e-learning students, faculty, and staff, contractors, and volunteers.

Strategic Initiatives:

1. Prepare a network operations center [NOC] plan and build/execute a staged implementation/deployment plan;
2. Begin planning and execution of primary data center upgrades and enhancements;
3. Continue to grow and expand the Science DMZ;
4. Continue to build and enhance resiliency and redundancy in mission-critical services;
5. Complete identity management system roadmap and implement;
6. Create a network bandwidth scaling metric to associate customer service levels with aggregate bandwidth demand.

Success will be measured by:

• Service availability and up time measures for key services and assets;
• Percentage of critical end user devices covered by appropriate security service;
• Customer bandwidth availability and utilization by service;
• Percentage of campus covered with Wifi (802.11n and 802.11ac).

Links:

• **University Strategic Plan, Faculty, SI 1**: Significantly upgrade academic facilities related to instruction in order to meet or exceed the quality of those at peer institutions.
• **University Strategic Plan, Governance SI 1:** Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and aligns all stakeholders to the Vision and Mission.
• **University Strategic Plan, Governance SI 2:** Provide each level of governance with data analytics capabilities that create a collaborative culture and increase the University's overall impact.

Goal V: Information Technology Governance - *Develop information technology policies, procedures, and practices that efficiently and effectively manage Information Technology assets and meet the technology needs, goals, and objectives of the university.*

The Information Technology governance structure of a campus aids in the prioritization of resources and can lead to a more collaborative, as well as potentially more efficient, approach to Information Technology decision-making. Technology advisory groups, tasked to view Information Technology from a campus perspective, can help balance the 'have' and 'have-nots' environment associated with a 'siloed' approach to technology.

Strategic Initiatives:

1. Continue to work with and guide the Instructional Technology Advisory Council (ITAC) defining and managing classroom and laboratory technology standards, prioritizing instructional technology projects/initiatives, and recommending/developing new pedagogies that fully utilize technology to enhance the educational experience and increase learning outcomes of our students;
2. Expand IT Managers group and build onboarding techniques to expand technology knowledge on campus;
3. Establish and Organize a Strategic Business Intelligence governing body;
4. Establish Operational Management Group of BI Analysts across the Enterprise;
5. Expand/Grow expertise in sophisticated reporting, analytics, and interpretation of results with a business intelligence competency center;
6. Enhance policies, governance structures, and metrics to increase effectiveness of Information Security program and foster accountability across the University;
7. Continue to build the University IT community in order to improve innovation, collaboration, diversity, and inclusion through initiatives such as ongoing communities of practices, lunch and learn seminars for IT managers, mentoring and coaching, and university-wide awards and recognition;
8. Identify and implement a common service and support philosophy across the enterprise, including the use of IT management tools and processes where it will improve the service and support experience for faculty, students, and staff;
9. Build common leadership language, strengths and a culture of inclusion by investing in a continuing leadership development program and ongoing activities that bring IT leaders at all levels together.

Success will be measured by:

- Number and cost of recommendations that are actionable and implemented;
- Annual published IT Roadmaps to identify key short-term tactical plans;
- IT Governance charters.

Links:

- **University Strategic Plan, Governance SI 1:** Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and aligns all stakeholders to the Vision and Mission.

University of Louisiana at Lafayette
Intermediate Term IT Roadmap (Associated Projects)

University Computing Support Services is currently evaluating products that meet the requirements defined in our Identity Management Strategy and System Implementation Roadmap
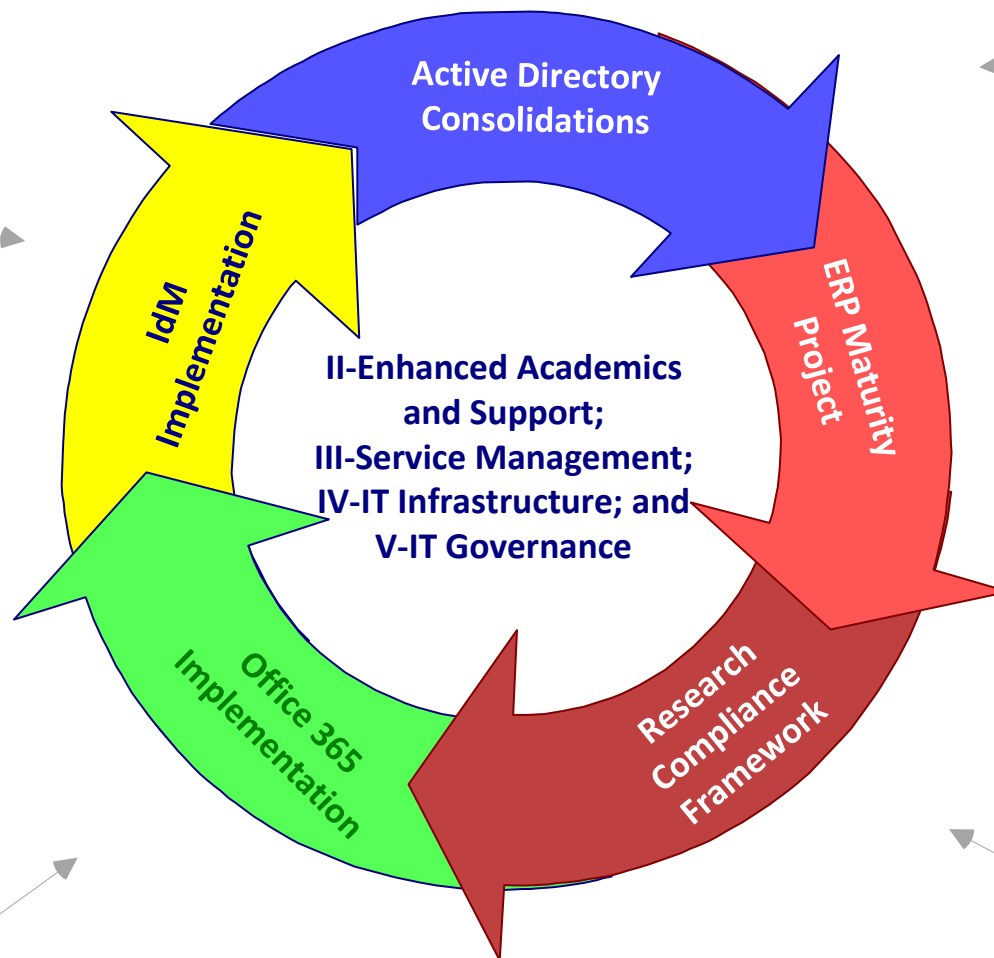
The last few Active Directory (NIRC, CACS, IRI/CBIT, UP, and Picard) implementations on campus are currently begin planned and scheduled for conversion

This three-year project is designed to implement Advise CRM and Elevate CE, continue and support business process transformation, Provide additional consulting for ePAF, FLAC, ACA, and end-of year processes, assist in Banner 9 transformation, and assist in continued knowledge transfer and integration support

Active Directory Consolidations

ERP Maturity Project

IdM Implementation

II-Enhanced Academics and Support;
III-Service Management;
IV-IT Infrastructure; and
V-IT Governance

Office 365 Implementation

Research Compliance Framework

University Computing Support Services is currently in the planning phase of migrating email and Office Applications to the Microsoft Office 365 Platform

IT Security is expanding its Security Platform to enable Researchers, Centers, and Business Units achieve greater visibility into their security posture and compliance standings. The platform assists internal groups with Risk, Vulnerability, and Compliance management using Assurance Report Cards for industry standards and regulatory mandates

Strategic Accomplishments in Information Technology

Strategic Goals and Objectives	Goal I: Talent Management	Goal II: Technology Enhanced Academic and Support Facilities	Goal III: Service Management	Goal IV: Information Technology Infrastructure	Goal V: Information Technology Governance
	Work with Human Resources to develop processes and procedures designed to attract, develop, motivate, and retain well-trained, productive, and engaged information technology staff.	*Provide the University teaching, learning and research community with the facilities, technologies, resources, and administrative solutions necessary for recognition as an eminent major research university.*	*Create, develop, deploy and manage meaningful enterprise services that produce business value that matters.*	*Establish a sustainable, scalable, secure, robust, and reliable Information Technology infrastructure that enables a positive and consistent technology experience for all users.*	*Develop information technology policies, procedures, and practices that efficiently and effectively manage Information Technology assets and meet the technology needs, goals, and objectives of the university.*
Completed	• Completed transition of position description enhancements to incorporate expanded credentialing in multiple key support positions across the IT enterprise • Reorganized key components of IT Organization to align with mission-critical services (Enterprise Application Services, University Computing Support Services, Network Services, IT Security, and Project Management Services) • Rebranded the IT Helpdesk as the IT Service Desk	• Partnering with Academic Affairs, the Student Technology Enhancement Program has completed procurement, construction, and provisioned a total of 165 Smart Classrooms/Technology Enhanced Classrooms on campus (approximately 66 new rooms over the last three years) • Since 2016, Network Facilities has completed 68 cable plant/fiber improvement projects in 53 separate buildings/venues on campus totaling $778K (does not include new construction) • Completed Phase I of the Science DMZ connectivity in Abdalla, Oliver, Madison, and Burke Hall	• Aligned our current desktop/laptop standards with required ERP system functionality and developed mechanisms, services, and products for users to upgrade easily and cost-effectively • Completed Phase I of the implementation of the new IT Service Management System and now track all technology incidents/requests using the system • Deployed and developed processes for real-time network traffic and Wifi performance monitoring and initiated the automation in service repair requests • Service Desk responds to an average 2,180 incidents/requests per month (73/day) and resolves 58% "first call"	• Completed Initial ERP Implementation on budget and on time • Successfully integrated over 75 applications, data exchange protocols, and end-user services with ERP • Expanded ISP connectivity to three ISP's in two separate locations supporting a total of 31 Gbps for fully reduandant internet drains • Upgraded Baker, Huger, Bonin, Coronna, Legacy Park Wifi Access Points to increase throughput and move to rooms • Completed "Second site" data center work at Abdalla Hall to include servers, disk storage, network ISP connections, and firewall/UTM services • Incorporated Physical Security (video surveillance and card access) into IT Security services	• Designed, established charters, and began operations of key IT governance structures on campus including (but, not limited to) the Instructional Technology Advisory Council, an organized Change Control Board, Change Control Board Technical Review Team, Data Standards Committee, Subject Matter Expert Teams, and Integrations Review Team • BI team has guided the development of over 3900 reports, of which, 599 are automated and scheduled. Approximately 1,100 reports are run each week by University teams
Planned or In Progress	• IT Executive teams encouraging continuing involvement of staff in professional development opportunities, presentations at conferences, conventions and professional organizations	• Ongoing expansion and growth of Smart Classrooms/Technology Enhanced Classrooms on campus • Future cable plant (both copper and fiber) projects include Softball, New Housing Project, New Maintenance Building, Griffin Hall, Agnes Edwards Lab Updates, and the Creamery Building • Wireless Access Point upgrades are planned in Griffin, Maxim Doucet, and Dupre' Library	• Active Directory (directory services) fold-in of remaining hold outs of key areas on campus including (CACS, Picard Center, University Police, and NIRC) • Development of Application Integrations Framework to assist University constituents in planning application integration with University ERP and other mission-critical systems • Began Phase II of the IT Service Management System Project that includes enhancement of Service Catalog, configuration management database, self-service portal to improve customer interaction with Service Desk, and enhanced performance metrics	• Began the ERP Maturity project which consists of 189 key milestones/tasks designed to continue University business process transformation, provide additional support/training, and enhance technical knowledge transfer for all major functional areas • Began the Chrome River Travel and Expense Project • Began the Advise (current student CRM) and Elevate (continuing education) implementations • Begin Phase I of Identity and Access Management System Project to facilitate core account provisioning, password management services, and role-based access control	• Identity Management Governance Structure • IT Security is expanding its Security Platform to enable Researchers, Centers, and Business Units to achieve greater visibility into their security posture and compliance standings. The platform assists internal groups with risk, vulnerability, and compliance management using assurance report cards that meet industry standards and regulatory mandates

Source: University of Louisiana at Lafayette 2015- 2020 IT Strategic Plan