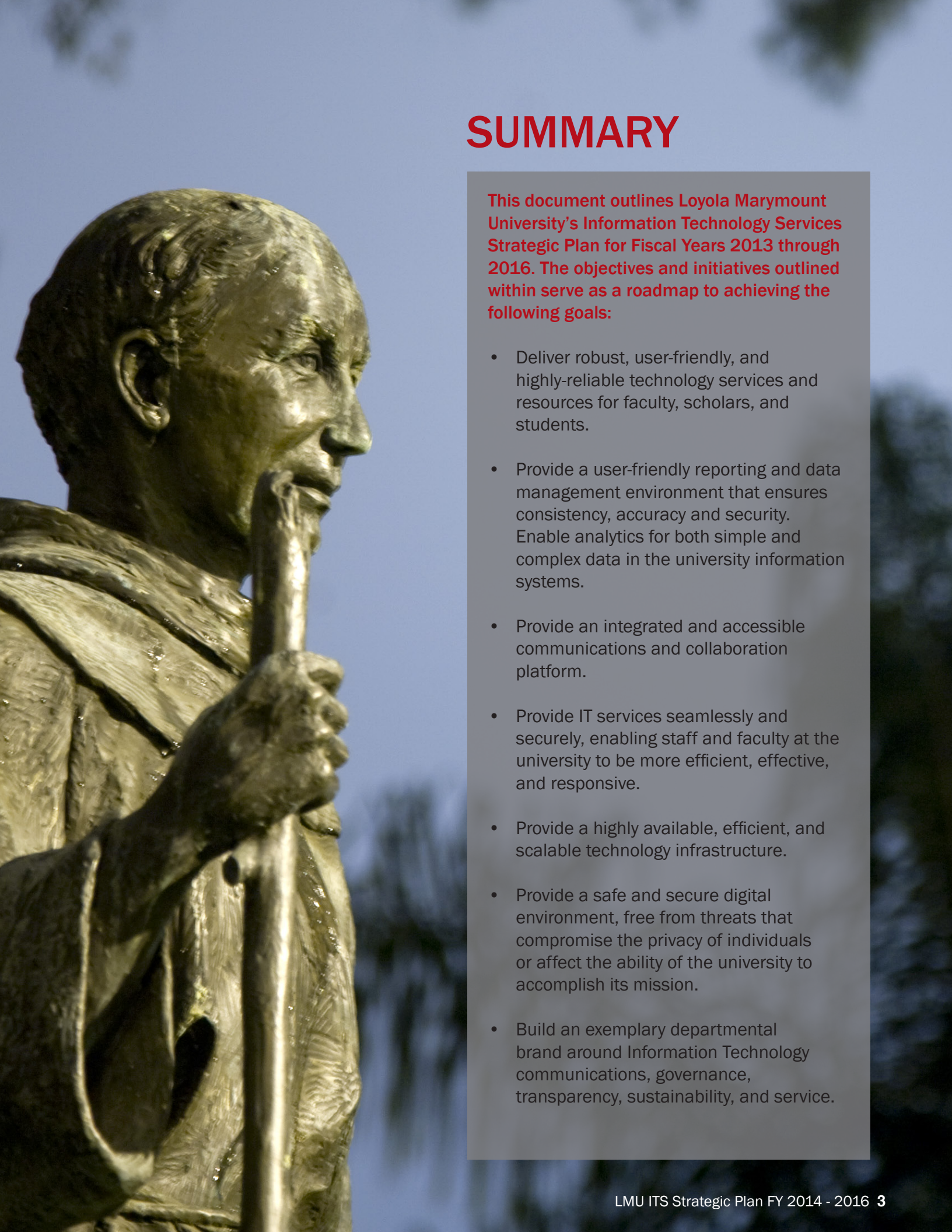
Strategic Plan
FY 2014 - 2016

LMU | LA
Information Technology Services

CONTENTS



SUMMARY

This document outlines Loyola Marymount University's Information Technology Services Strategic Plan for Fiscal Years 2013 through 2016. The objectives and initiatives outlined within serve as a roadmap to achieving the following goals:

- Deliver robust, user-friendly, and highly-reliable technology services and resources for faculty, scholars, and students.
- Provide a user-friendly reporting and data management environment that ensures consistency, accuracy and security. Enable analytics for both simple and complex data in the university information systems.
- Provide an integrated and accessible communications and collaboration platform.
- Provide IT services seamlessly and securely, enabling staff and faculty at the university to be more efficient, effective, and responsive.
- Provide a highly available, efficient, and scalable technology infrastructure.
- Provide a safe and secure digital environment, free from threats that compromise the privacy of individuals or affect the ability of the university to accomplish its mission.
- Build an exemplary departmental brand around Information Technology communications, governance, transparency, sustainability, and service.

ACADEMIC SERVICES

Deliver robust, user-friendly, and highly reliable technology services and resources for faculty, scholars, and students.

Provide physical technology and mobile-friendly digital learning services that support and enhance teaching allowing for 'anytime anywhere' learning.

- Create a roadmap and plan for the university Learning Management System (LMS).
- Implement a simplified process for creating and supporting faculty websites.
- Increase adoption of the university LMS.
- Implement new LMS mobile and text messaging features.
- Provide classrooms and learning spaces with pedagogically sound technology (including A/V).
- Provide academic computing resources with pedagogically sound software & hardware.
- Pilot distributed printing capabilities with printer kiosks.
- Assess initial phases of desktop virtualization and architect solutions to offer students and faculty remote access to resources.
- Make classroom capture available in every general purpose classroom.

Align academic technologies with new core curriculum requirements.

- Assist in the creation of library learning objects repository.
- Explore writing technologies for use in courses with significant essay components.

Improve and provide better alignment of the support services that enhance the mission and goals of academic units.

- Evaluate current space plan for support services.
- Create templates for online training to be leveraged by units across campus.
- Partner the Student Help Desk with William H. Hannon Library.
- Assess Help Desk hours for students and faculty.
- Continue and enhance partnership with the Library, the Center for Teaching Excellence, and the Academic Resource Center in order to create a coordinated portfolio of services for faculty.
- Relocate existing academic technology support units based on space plan.
- Evaluate offering for-credit technology courses, in collaboration with academic programs.

ACADEMIC SERVICES

Provide appropriate technologies and services to support online initiatives.

- Provide a complete portfolio of academic technology solutions to be used for online and hybrid courses.
- Create online training, including templates and rubrics, to be leveraged by academic departments or individual faculty who wish to create online courses.
- Create partnerships with departments that are seeking to extend or begin online course offerings (including SOE, SFTV, Extension, and others).

Support and enhance the research mission of the university.

- Create a portal/website that clearly articulates what services are provided for research support.

Metrics

- **Usage Statistics: LMS % of courses which are active.**
- **Technology Survey Satisfaction Rates: Learning space satisfaction, faculty perspective of support effectiveness, student perspective of faculty's effective use of technology.**

DATA MANAGEMENT & REPORTING

Provide a user-friendly reporting and data management environment that ensures consistency, accuracy and security. Enable analytics for both simple and complex data in the university information systems.

Establish the strategy for a university-wide reporting solution.

- Identify and assess the usage of reporting on campus.
- Develop a roadmap for a university reporting solution system.
- Deliver appropriate technologies in support of the roadmap.

Establish a set of governance, processes, policies, and standards that define and manage university data (Master Data Management).

- Partner with the Office of Decision Support to finalize roadmap for expanding the data warehouse to key decision-makers across the university.
- Partner with the Office of Decision Support to develop the enterprise data warehouse & business intelligence for identified candidates.
- Identify Master Data Management (MDM) standards for the university.
- Establish a MDM governance organization.
- Develop MDM elements, structure, process, business rules and data quality standards.
- Establish data access, delivery mechanisms, security and usage.

Provide reports of academic technology usage for academic leadership.

- Deliver statistics of MYLMU Connect usage.
- Deliver classroom capture statistics.
- Deliver MYLMU Connect analytics.

Provide technologies to support assessment of students.

- Deliver infrastructure for storage of academic assessment data.
- Provide an assessment portfolio system that allows for having a digital repository.

Metrics

- **Reporting System Usage.**
- **Technology Survey: Degree to which users of the data find data reliable.**
- **Technology Survey: Ease of obtaining information needed to be effective in role.**

COMMUNICATIONS & COLLABORATION

Provide an integrated and accessible communications and collaboration platform.

Enhance campus internal communication processes and technologies.

- Partner with internal communications owner to proactively drive adoption of the university calendar, content search, the portal, opt-in communication capabilities (including text messaging).
- Consolidate intranet and internet web pages in partnership with the Office of Web, New Media, and Design.
- Develop a strategy for delivering mobile services. The strategy will include parameters for prioritization, integration with other university mobile services, etc.

Enhance collaboration tools and processes.

- Finalize a roadmap for supporting collaboration processes including file sharing and shared document editing.
- Deliver appropriate technologies in support of collaboration processes roadmap.

Metrics

- **Staff Climate Survey**
- **Technology Survey**
- **Active Content Measurement**

IT SERVICES

Deliver IT services seamlessly and securely, enabling staff and faculty at the university to be more efficient, effective, and responsive.

Optimize existing technology resources.

- Enhance business analyst and technology support for university units.
- Increase awareness and buy-in of existing technologies through better communication and focused workshops.
- Strengthen the university process for reviewing sub-optimal systems and processes.

Create robust application infrastructure to support a loosely coupled and tightly integrated application environment.

- Identify strategic candidates for synchronous application integrations.
- Reduce point-to-point integrations by migrating existing and implementing new integrations on the Fusion Middleware platform.
- Expand data set and capabilities of Microsoft Forefront Identity Manager (FIM) to enhance automation of account provisioning process.
- Implement the orchestration of various workflows to enhance business process and reduce bulk nightly integrations.

Support the implementation of user-friendly, cost-effective, and highly integrated information management tools and services for staff. (Sponsors in parentheses.)

- Implement video storage solutions for academic and business units.
- Implement system to best collect parent data.
- Implement Constituent Relationship Management (CRM) for student services.
- Upgrade advancement system. (University Relations)
- Implement HR Self Service Benefits Enrollment. (Human Resources)
- Implement community and complaint resolution. (Co-sponsored)
- Upgrade Blackboard Transact university card system. (Campus Business Services)
- Evaluate and implement Service-Now as a solution for other university service departments.
- Implement CRM for University Relations. (University Relations)
- Implement scholarship management. (University Relations)
- Implement Banner Student Information System (Loyola Law School)
- Evaluate and implement Service-Now as a solution for other university service departments.

Build and develop system architectural standards.

- Create standards

Metrics

- **Increase in Efficiency: Number of people, duration, and cost.**
- **Increase in Effectiveness: Outcome of the processes, reduction of error and redundancy.**
- **Technology Survey: Technology enables responsiveness to business needs.**

INFRASTRUCTURE

Provide a highly available, efficient, and scalable technology infrastructure.

Evaluate and assess services that can be appropriately moved to the cloud.

- Assess and pilot cloud-based email services.
- Assess and pilot cloud-based backup/ disaster recovery (DR) services.
- Assess and pilot cloud-based high performance computing (HPC) services.
- Implement cloud-based email services.
- Implement cloud-based backup/DR services.
- Implement cloud-based HPC services.

Provide a single source of truth for hardware and software technology assets.

- Migrate, to the greatest extent possible, infrastructure asset information to Service-Now.
- Finalize software asset management.

Automate and streamline infrastructure processes.

- Automate guest access to network services.
- Create infrastructure lifecycle management workflow.

Provide robust network to support current and anticipated needs of the university.

- Complete all phases of network re-architecture.
- Enhance wireless in residence halls, learning spaces, and other essential areas.
- Implement 10G to Internet.
- Complete fiber loop implementation.

Enhance monitoring, alerting, and notification processes.

- Establish an integrated approach to monitoring services.
- Establish a formal network operations center (NOC).

Provide local geographic redundancy between two primary data centers.

- Implement a secondary storage area network (SAN) to support redundant infrastructure.

Establish a space plan that would make optimal use of existing data center footprints.

- Consolidate data centers.

Provide improvements and enhancements to voice-based services.

- Virtualization of VoIP.
- Implement new features to enhance voice communications.
- Reduce reliance on PBX.

Provide support for construction of new Life Sciences Building.

- Provide network implementation support.
- Provide academic technology support.

Metrics

- **Routine Metrics on System(s) Availability (unplanned outages): Network (wireless/wired), Telecom, CRM, MYLMU Connect, NolijWeb, Banner, Email.**
- **Capability/Capacity: Annual % of change, number of network devices, number of virtual & physical systems, power, HVAC, costs, storage.**

SECURITY

Provide a safe and secure digital environment, free from threats that compromise the privacy of individuals or affect the ability of the university to accomplish its mission.

Determine the baseline for security and privacy risks facing the university.

- Establish a risk metric similar to the Department of Homeland Security (DHS) advisory system.

Determine the baseline of information and privacy awareness knowledge.

- Develop a pre-test/post-test research tool.
- Market security awareness initiatives.

Create an adequate defensive posture plan to protect core information assets.

- Develop and publish a whitepaper.

Develop and maintain a data loss prevention plan.

- Identify shadow systems.
- Identity finder tool roll out.
- Remove/redact data where necessary.
- Establish data masking requirements.

Develop an information security incident response plan.

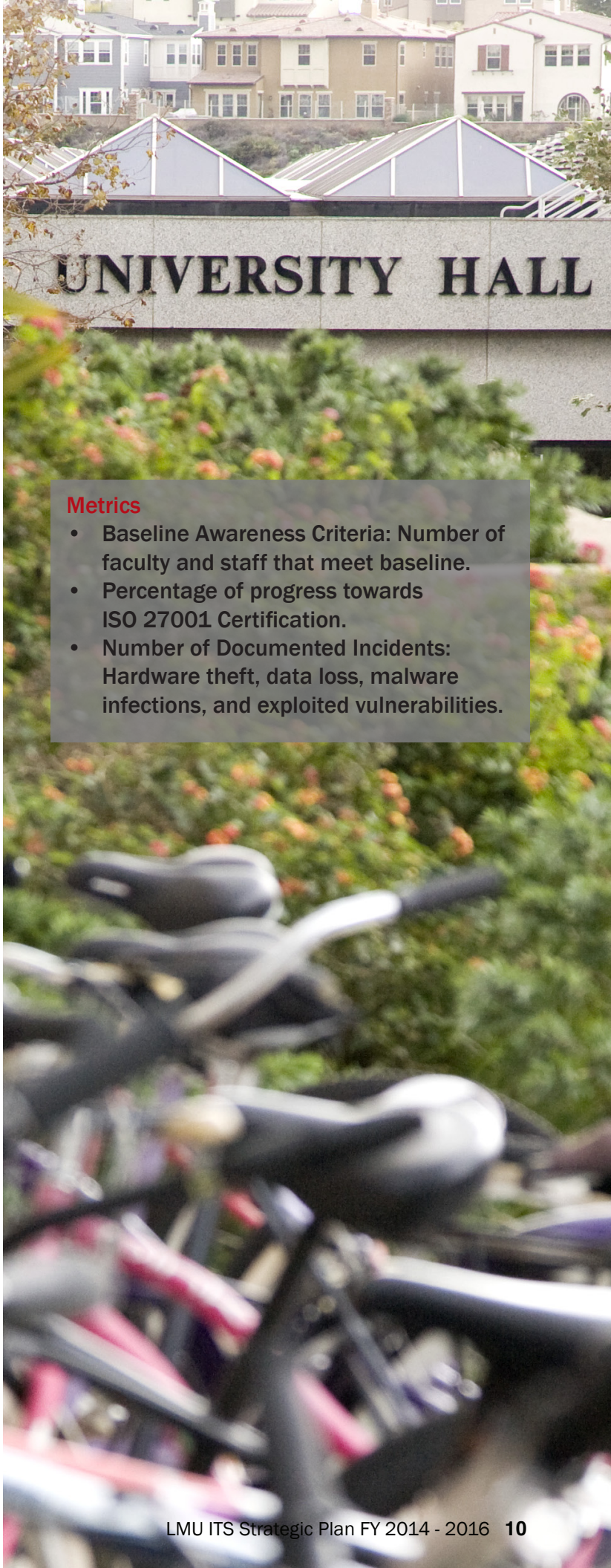
- Document incidents in an adequate manner.

Complete a disaster recovery/business continuity (DR/BC) plan for core services provided by ITS.

- Implement disaster recovery architecture.
- Assess the disaster recovery services at USF.
- Establish disaster recovery/business continuity testing.

Build an Information Security Management System (ISMS) to prepare for ISO 27001 certification.

- Purchase ISO 27001 materials.
- Perform gap analysis.
- Write an analysis and plan.
- Submit for ISO 27001 certification.



Metrics

- **Baseline Awareness Criteria: Number of faculty and staff that meet baseline.**
- **Percentage of progress towards ISO 27001 Certification.**
- **Number of Documented Incidents: Hardware theft, data loss, malware infections, and exploited vulnerabilities.**

BRAND BUILDING

Build an exemplary departmental brand around Information Technology communications, governance, transparency, sustainability, and service.

Develop an ITS communications practice.

- Create a formal ITS communications discipline.
- Create a website to promote ITS communications.

Retain the best team.

- Incorporate recommendations from Administration Division staff climate analysis.
- Develop standards for ITS-hosted meetings.
- Create a culture of appreciation by celebrating success.
- Implement telecommuting 2.0.
- Provide roadmaps and support for ITS employees to pursue different kinds of careers within IT.

Create a well-defined catalog of technology services that are offered by ITS, as well as a portfolio of business services offered by process owners.

- Continue to build out Service-Now service catalog and service portfolio.

Create repeatable and sustainable processes for supporting customers.

- Develop a culture of standard operation procedures (SOP).
- Populate the knowledge base of information.
- Automate processes where possible.

Continue to drive social IT practices within ITS.

- Continue the adoption of the live feed within Service-Now for internal ITS communications.

Develop project management and portfolio management best practices.

- Formalize role of appropriate governance structure in prioritizing technology initiatives.

Create buy-in from the university community on technology initiatives.

- Continue to build an active, transparent, and effective approach to decision-making within the university community.

Create service opportunities for ITS staff.

Metrics:

- **Technology Survey.**
- **Communications.**

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
ACADEMIC SERVICES	Technology & Learning	Create Learning Management System (LMS) Roadmap Increase LMS adoption Add mobile/text features to LMS Distribute printing via kiosks Assess remote access resources Simplify faculty websites Improve learning space technologies Expand classroom capture		Increase accessibility
	Curriculum & Research	Create library learning repository Explore writing technologies Clearly articulate research support services		
	Academic Support	Evaluate space plan for support services Create online training templates Partner Student Help Desk with Library Assess Help Desk hours Enhance campus partnerships	Relocate Academic Technology Support	Offer for-credit technology courses
	Online Support	Create Academic Technology solution portfolio Create online training rubrics Help departments extend online course offerings		

Initiatives will not necessarily be completed in the fiscal year in which they begin.

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
DATA MANAGEMENT & REPORTING	Data Reporting Strategy	Assess data reporting usage Develop reporting solution system roadmap	Deliver reporting solution technologies	
	Master Data Management (MDM)	Finalize data warehouse expansion roadmap Develop data warehouse and business intelligence	Identify University MDM standards Establish MDM governance organization	Develop MDM standards Establish MDM usage and delivery
	Academic Technology Usage	Deliver MYLMU Connect usage statistics Deliver classroom capture statistics	Deliver MYLMU Connect analytics	
	Student Assessment Technology		Deliver academic assessment data storage	Provide assessment portfolio system with digital repository

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
COMMUNICATIONS & COLLABORATION	Internal Communications	Partner with internal communications owner Consolidate web pages Develop mobile strategy		
	Collaboration	Finalize collaboration roadmap	Deliver collaboration technologies	

Initiatives will not necessarily be completed in the fiscal year in which they begin.

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
IT SERVICES	Technology Resources	Enhance business analyst and tech support Increase awareness of existing technologies Strengthen system review process		
	Application Infrastructure	Identify candidates for application integration Implement new integrations on Fustion Middleware platform Enhance account provisioning automation		Improve business process workflows
	Information Management	Implement video storage solutions Implement parent data collection Implement CRM for Student Services Upgrade advancement system Implement HR Self-Service Benefits Enrollment Implement community and complaint resolution Implement student information system at Loyola Law School Upgrade Blackboard Transact Evaluate Service-Now as a solution for other departments	Implement CRM for University Relations	Implement scholarship management
	Architecture	Create standards		

Initiatives will not necessarily be completed in the fiscal year in which they begin.

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
INFRASTRUCTURE	Cloud-based Services	Assess and pilot email services Assess and pilot backup services Assess and pilot high performance computing (HPC) services	Implement cloud-based email services Implement cloud-based backup services	
	Asset Management	Migrate asset information to Service-Now Finalize software asset management		
	Infrastructure Processes	Automate guest access to networks	Create infrastructure lifecycle management workflow	
	Networking	Complete network re-architecture Enhance wireless in essential spaces Implement 10G to Internet		Complete fiber loop implementation
	Monitoring & Alerts	Integrate monitoring services		Establish a formal network operations center
	Redundancy	Implement a secondary storage area network		
	Space Plan	Consolidate data centers		
	Voice Services	Virtualization of VoIP Enhance voice communications features	Reduce Reliance on PBX	
	Life Sciences Construction Support	Provide network implementation support	Provide academic technology support	

Initiatives will not necessarily be completed in the fiscal year in which they begin.

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
SECURITY	Risk Assessment	Establish a risk metric		
	Privacy Awareness	Develop a knowledge measurement tool Market security awareness initiatives		
	Information Protection		Develop and publish a whitepaper	
	Data Loss Prevention		Identify shadow systems Roll out identity finder tool	
	Incident Response Plan	Document incidents		
	Disaster Recovery	Implement disaster recovery architecture Assess disaster recovery services at USF		
	Information Security Management System	Purchase ISO 27001 materials		Perform gap analysis Write an analysis and plan Submit for ISO 27001 certification

Initiatives will not necessarily be completed in the fiscal year in which they begin.

INITIATION PLAN

		FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016
BRAND BUILDING	Communications Practice	Create a formal ITS communications practice Create a website to promote ITS communications		
	Employee Retention	Incorporate staff climate analysis recommendations Develop meeting standards Celebrate employee successes Implement telecommuting 2.0	Support employees in the pursuit of IT careers	
	Service Catalog		Continue to build service catalog and portfolio	
	Customer Support	Develop standard operating procedures Populate knowledge base		Automate processes
	Social IT	Continue internal adoption of Service-Now live feed		
	Project & Portfolio Management	Formalize governance structure		

Initiatives will not necessarily be completed in the fiscal year in which they begin.