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

<table>
<thead>
<tr>
<th>ACADEMIC SERVICES</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
</tr>
</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>DATA MANAGEMENT &amp; REPORTING</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess data reporting usage</td>
<td>Deliver reporting solution technologies</td>
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<tr>
<td>Develop reporting solution system roadmap</td>
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<tr>
<td>Finalize data warehouse expansion roadmap</td>
<td>Identify University MDM standards</td>
<td>Develop MDM standards</td>
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<tr>
<td>Develop data warehouse and business intelligence</td>
<td>Establish MDM governance organization</td>
<td>Establish MDM usage and delivery</td>
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<tr>
<td>Deliver MYLMU Connect usage statistics</td>
<td>Deliver MYLMU Connect analytics</td>
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<tr>
<td>Deliver classroom capture statistics</td>
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<td>Develop MDM standards</td>
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<td>Establish MDM governance organization</td>
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<tr>
<td>Establish MDM usage and delivery</td>
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<thead>
<tr>
<th>COMMUNICATIONS &amp; COLLABORATION</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
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</thead>
<tbody>
<tr>
<td>Internal Communications</td>
<td>Partner with internal communications owner</td>
<td></td>
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<tr>
<td>Consolidate web pages</td>
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<td>Develop mobile strategy</td>
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<tr>
<td>Finalize collaboration roadmap</td>
<td>Deliver collaboration technologies</td>
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<table>
<thead>
<tr>
<th>IT SERVICES</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
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<tbody>
<tr>
<td><strong>Technology</strong></td>
<td>Enhance business analyst and tech support</td>
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<tr>
<td><strong>Resources</strong></td>
<td>Increase awareness of existing technologies</td>
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<td></td>
<td>Strengthen system review process</td>
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<tr>
<td><strong>Application</strong></td>
<td>Identify candidates for application integration</td>
<td></td>
<td>Improve business process workflows</td>
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<tr>
<td><strong>Infrastructure</strong></td>
<td>Implement new integrations on Fustion Middleware platform</td>
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<td></td>
<td>Enhance account provisioning automation</td>
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<tr>
<td><strong>Information</strong></td>
<td>Implement video storage solutions</td>
<td>Implement CRM for University Relations</td>
<td>Implement scholarship management</td>
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<tr>
<td><strong>Management</strong></td>
<td>Implement parent data collection</td>
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<tr>
<td></td>
<td>Implement CRM for Student Services</td>
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<td></td>
<td>Upgrade advancement system</td>
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<td></td>
<td>Implement HR Self-Service Benefits</td>
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<td></td>
<td>Enrollment</td>
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<tr>
<td></td>
<td>Implement community and complaint resolution</td>
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<td></td>
<td>Implement student information system at Loyola Law School</td>
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<td></td>
<td>Upgrade Blackboard Transact</td>
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<td></td>
<td>Evaluate Service-Now as a solution for other departments</td>
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<tr>
<td><strong>Architecture</strong></td>
<td>Create standards</td>
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<thead>
<tr>
<th>INFRASTRUCTURE</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
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<tbody>
<tr>
<td><strong>Cloud-based Services</strong></td>
<td>Assess and pilot email services</td>
<td>Implement cloud-based email services</td>
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<td></td>
<td>Assess and pilot backup services</td>
<td>Implement cloud-based backup services</td>
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<tr>
<td></td>
<td>Assess and pilot high performance computing (HPC) services</td>
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<tr>
<td><strong>Asset Management</strong></td>
<td>Migrate asset information to Service-Now</td>
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<td></td>
<td>Finalize software asset management</td>
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<tr>
<td><strong>Infrastructure Processes</strong></td>
<td>Automate guest access to networks</td>
<td>Create infrastructure lifecycle management workflow</td>
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<tr>
<td><strong>Networking</strong></td>
<td>Complete network re-architecture</td>
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<td>Complete fiber loop implementation</td>
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<td></td>
<td>Enhance wireless in essential spaces</td>
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<td></td>
<td>Implement 10G to Internet</td>
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<tr>
<td><strong>Monitoring &amp; Alerts</strong></td>
<td>Integrate monitoring services</td>
<td></td>
<td>Establish a formal network operations center</td>
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<tr>
<td><strong>Redundancy</strong></td>
<td>Implement a secondary storage area network</td>
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<tr>
<td><strong>Space Plan</strong></td>
<td>Consolidate data centers</td>
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<tr>
<td><strong>Voice Services</strong></td>
<td>Virtualization of VoIP</td>
<td>Reduce Reliance on PBX</td>
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<td></td>
<td>Enhance voice communications features</td>
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<tr>
<td><strong>Life Sciences Construction Support</strong></td>
<td>Provide network implementation support</td>
<td>Provide academic technology support</td>
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<table>
<thead>
<tr>
<th>SECURITY</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
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<tbody>
<tr>
<td>Risk Assessment</td>
<td>Establish a risk metric</td>
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<tr>
<td>Privacy Awareness</td>
<td>Develop a knowledge measurement tool</td>
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<td></td>
<td>Market security awareness initiatives</td>
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<tr>
<td>Information Protection</td>
<td>Develop and publish a whitepaper</td>
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<td>Data Loss Prevention</td>
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<td>Identify shadow systems</td>
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<td>Roll out identity finder tool</td>
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<td>Incident Response Plan</td>
<td>Document incidents</td>
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<tr>
<td>Disaster Recovery</td>
<td>Implement disaster recovery architecture</td>
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<td></td>
<td>Assess disaster recovery services at USF</td>
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<tr>
<td>Information Security Management System</td>
<td>Purchase ISO 27001 materials</td>
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<td>Perform gap analysis</td>
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<td>Write an analysis and plan</td>
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<td>Submit for ISO 27001 certification</td>
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<table>
<thead>
<tr>
<th>BRAND BUILDING</th>
<th>FISCAL YEAR 2014</th>
<th>FISCAL YEAR 2015</th>
<th>FISCAL YEAR 2016</th>
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</thead>
<tbody>
<tr>
<td><strong>Communications Practice</strong></td>
<td>Create a formal ITS communications practice</td>
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<td></td>
<td>Create a website to promote ITS communications</td>
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<tr>
<td><strong>Employee Retention</strong></td>
<td>Incorporate staff climate analysis recommendations</td>
<td>Support employees in the pursuit of IT careers</td>
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<td></td>
<td>Develop meeting standards</td>
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<td></td>
<td>Celebrate employee successes</td>
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<td></td>
<td>Implement telecommuting 2.0</td>
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<tr>
<td><strong>Service Catalog</strong></td>
<td></td>
<td>Continue to build service catalog and portfolio</td>
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<tr>
<td><strong>Customer Support</strong></td>
<td>Develop standard operating procedures</td>
<td></td>
<td>Automate processes</td>
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<td></td>
<td>Populate knowledge base</td>
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<tr>
<td><strong>Social IT</strong></td>
<td>Continue internal adoption of Service-Now live feed</td>
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<tr>
<td><strong>Project &amp; Portfolio Management</strong></td>
<td>Formalize governance structure</td>
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</tbody>
</table>

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