FY19 FACTS

Data Centers & Networks
Loyola’s Lakeside data centers house 400 devices including servers, appliances, and equipment:
- 800+ Terabytes of online storage; 200+ Terabytes of e-mail storage;
- 24 Petabyte (PB) cloud storage for O365
- 90 physical enterprise class servers and over 350 virtual servers
- 2,700 wireless access points covering 95% of Loyola’s buildings
- 63,000 devices registered on the wireless network
- 17 GB combined internet bandwidth (10.5 LSC, 3 WTC, .5 HSC, 3 IPTV Streaming)
- On average students bring 4.5 enabled devices to campus

Other Facts
- 10 presentations were delivered by ITS staff members at leading technology and higher education venues
- 6 ITS Staff members taught as adjunct faculty for Loyola and elsewhere
- 4 ITS Staff members taught Emergence classes
- 2 ITS Staff member completed Graduate Degrees
- 1 ITS Staff member received Commitment to Excellence Award

FY19 Technology Fee Allocations

Software & Sustenance Maintenance 40%
Student Lab Support 15%
Telecom/Internet 10%
Software Support 34%
Membership & Dues 1%

Top 10 Information Security Threats Blocked in Millions FY’19

“Reputation” is Number One and Exceeds $90 Million

Malware, 76M
Spam, 8.4M
Email Firewall, 12M
Phishing, 1.3M
Application Attack, 1.8M
Suspicious Activity, 1.5M
Intrusion, 1.8M
Malicious Code, 1.3M
Other, 1.3M

FY20 & BEYOND

MAJOR INITIATIVES - FY20 Q1-Q2

Student Technology Support
- LOUIS Fluid Page Rollouts
- Preferred Name for Students - Implementation
- Writing Placement Infrastructure
- Student Conduct & Concerns System - Masonet
- Career Services Software Replacement - Handshake
- Learning Portfolio Review
- Q4F Student Mentoring Software Pilot - PeopleGrove
- Streamline/Simplify Financial Aid Processes (2)
- Course Schedule Builder

Administrative Initiatives
- Lawson/Kronos Enhancements (5)
- Replacement for ECSI/UnNet
- Travel & Expense Management Technology Solution
- Board of Trustees SharePoint Portal
- Benefit Plan Termination Date Modification
- Space & Asset Management System - Phase 3

Infrastructure
- Campus Constructive Initiatives (8)
- Information Security Program (12)
- IT Disaster Recovery (8)
- Max-OS Computer Management Application
- LUI Foundation: Collaboration & Security (5)

Initiatives under development include:
- Replace the Office of International Programs administration systems (Terra Dotta)
- Modernize the Board of Trustees collaboration website (Sharepoint)
- Enhance Career Services Relationships & Placements (Handshake)
- Pilot an Alumni/Student Mentoring Platform (PeopleGrove)
- Improve the speed of Financial Aid Verifications (Inceptia)
- Conduct Pilots for digital assistants and application virtualization
- Put in-place new cloud-based “Course Evaluation System” (SmartEvals)
- Adopt enterprise survey tool with cloud-based solution (Qualtrics)
- Transform Student Course Schedule Builder and Advising processes (EAB Navigate)
- Offer self-service training for Faculty to move courses online on short notice to support Business Continuity planning

LUC Technology Strategy - A Roadmap for Change

FY19 Summary

July 2019
Run... ongoing operations

Sample Service Volumes

**Daily**
- 1,246,100 e-mails received
- 15,500 student accesses to email from a mobile device
- 13,950 logins to LOCUS
- 4,955 total printed pages in Student Labs
- 30,000 visits to luc.edu, 37% from mobile devices

**Monthly**
- 200 Sakai support calls
- 27,000 computer lab logins
- 900 new lecture capture recordings
- 80 new post requests from Media Lab

**Annually**
- 402.9M network attacks blocked
- 201,480 visits to mobile LOCUS
- 347,000 checkouts from Media Lab
- 13,950 logins to LOCUS
- 1,440 Student lab and Classroom PC’s upgraded to Windows 10

Grow... information systems and services to optimize performance

Preferred Names
The ability to designate a preferred name was made available for current students, faculty, and staff in our Student System, LOCUS. An individual’s preferred name will be used on class and grade rosters, as the display name in email, and will be displayed in several other campus systems except when the legal name is required by law, policy, or business needs. Details about use of the preferred name, instructions for how to enter a preferred name in LOCUS, and a link to the full policy can be found on the Preferred Name FAQ webpage at [https://www.luc.edu/regec/preferred-name-FAQ.shtml](https://www.luc.edu/regec/preferred-name-FAQ.shtml).

iPlan
The University’s student tuition payment platform, iPlan, underwent a series of major enhancements. The functionality is used by more than 4,000 students annually with $79M budgeted within the plans. The average annual payment plan is around $22M. If a student makes payments instead of borrowing, their interest savings for 4 years could exceed $20K. Enhancements completed include improvements to the budget wizard, reconciliation process, and payment sync, as well as query updates and security role changes. For more information please visit the iPlan product website at [https://www.luc.edu/bursar/iPlan.shtml](https://www.luc.edu/bursar/iPlan.shtml).

Revenue to Expense Modeling
Loyola has developed a data model for evaluating the financial health of academic units and programs by comparing actual revenue generated to actual expenses incurred in the operation of the academic unit. Version 1 of the “Revenue to Expense Data Model” (RE) helped measure and track academic revenue and expenses of academic units. This version provides; “drill-down” capability to look at data for a school, program, course, instructor, and student level. Version 2.0, added functionality for additional revenue streams (e.g. gift and endowment revenue) and additional expenses (e.g. fund- ed gift and endowment funded scholarships). Rollout of Version 2.5 of the RE model includes JFRC data, and development of Version 3.0 includes revenue by academic plan.

Key Highlights
- Upgraded the Learning Management System (Sakai) to version 30,000
- 201,480 visits to mobile LOCUS
- 347,000 checkouts from Media Lab
- 13,950 logins to LOCUS
- 90 Learning tutorials viewed

Transform... new technologies and processes that fundamentally promote change

Loyola Digital Experience
Loyola Digital Experience, or “LDE”, officially launched as the technology direction to support the next University Strategic Plan. The stated direction includes three themes:
1) Foundational
2) Transformational
3) Consumable Experience
The first program launched in FY19. The program, “LDE Foundation: Collaboration and Security”, includes ten distinct projects that are intended to build a strong foundation of underlying technology to strengthen our information security posture and introduce more seamless and modern collaboration tools. Targeted completion of this program is FY21.

“LDE” Collaboration and Security Program

<table>
<thead>
<tr>
<th>Feature</th>
<th>Solution</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Mail to the Cloud</td>
<td>Exchange Online</td>
<td>FY20 Q1</td>
</tr>
<tr>
<td>Password Management Repository</td>
<td>Last Pass</td>
<td>FY20 Q2</td>
</tr>
<tr>
<td>Data Monitoring &amp; Data Loss Prevention</td>
<td>Azure DLP</td>
<td>FY20 Q3</td>
</tr>
<tr>
<td>Multi-Factor Authentication</td>
<td>Azure MFA</td>
<td>FY20 Q4</td>
</tr>
<tr>
<td>Password Self-Service</td>
<td>Azure Password Self-Service</td>
<td>FY20 Q4</td>
</tr>
<tr>
<td>Mobile Device Management</td>
<td>Intune</td>
<td>FY20 Q4</td>
</tr>
<tr>
<td>Privileged Access Management</td>
<td>Azure Privileged IAM</td>
<td>FY20 Q4</td>
</tr>
<tr>
<td>Single Sign-On Portal</td>
<td>O365 Application Portal</td>
<td>FY21 Q1</td>
</tr>
<tr>
<td>Email SPAM Filtering</td>
<td>Advanced Threat Protection</td>
<td>FY21 Q2</td>
</tr>
</tbody>
</table>

Several initiatives are also underway in “LDE Transformation”, including further progress and maturity of our use of Business Intelligence, dashboards and visualizations in institutional decision-making, and a digital assistant pilot to leverage Machine Learning in several service hubs.

Learning Analytics - Phase I and Phase II
Created a three-phased approach to assist Loyola’s faculty and administrators with interpreting course data to improve student engagement and learning outcomes. Phase I included 1:1 faculty consultations with a Learning Design Engineer for using the Sakai statistics tool. Phase II began building a model for learning data, joining data from different systems, and creating dynamic reports.

Enterprise Highlights

- 310 technology-equipped classroom spaces
- 1,400 Operational Report users
- 1,440 Student lab and Classroom PC’s upgraded to Windows 10
- 4,595 Faculty and Staff PC’s upgraded to Windows 10

Portfolio Summary
The Information Technology Executive Steering Committee (ITESC) provides ITS governance and project oversight, including IT project portfolio prioritization twice annually. The ITS project portfolio averages over 500 projects annually for the past five years. The ITS project portfolio size (effort of projects) has also grown over 25% over the prior 5 years.

FY19 Projects by Strategic Alignment

<table>
<thead>
<tr>
<th>Strategic Category</th>
<th>FY19 Q1-Q2 Completed Projects</th>
<th>FY19 Q3-Q4 Completed Projects</th>
<th>FY19 Total Completed Projects</th>
<th>FY19 % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic &amp; Faculty Support</td>
<td>7</td>
<td>5</td>
<td>12</td>
<td>11%</td>
</tr>
<tr>
<td>Administrative Initiatives</td>
<td>21</td>
<td>25</td>
<td>46</td>
<td>43%</td>
</tr>
<tr>
<td>Continuous Service Development</td>
<td>16</td>
<td>6</td>
<td>22</td>
<td>21%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>11</td>
<td>8</td>
<td>19</td>
<td>18%</td>
</tr>
<tr>
<td>Student Technology Support</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>7%</td>
</tr>
</tbody>
</table>

| FY19 Q1-Q2 | 58 | 49 | 107 | 100% |
| FY19 Q3-Q4 | 41% | 25% | 13% |
| FY19 | 42% | 37% | 12% |

| FY19 Total | 37% | 25% | 8% |
| Strategic Category | A-High | B-Medium | C-Low |
| M-Must Do | 8% | 13% | 12% |
| 4.8 Projects | 25% | 15% | 8% |
| Student Technology Support | 8% | 13% | 12% |

Total Enrollment by Term

<table>
<thead>
<tr>
<th>Total Enrollment by Term</th>
<th>Spring</th>
<th>Summer</th>
<th>Fall</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>12,000</td>
<td>8,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td>2020</td>
<td>12,000</td>
<td>8,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td>2021</td>
<td>12,000</td>
<td>8,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td>2022</td>
<td>12,000</td>
<td>8,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td>2023</td>
<td>12,000</td>
<td>8,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
</tbody>
</table>

| Key Themes | |
|-------------| |
| Developed application for Secure Submission of W-9 Form for Accounts Payable. | |
| Added an Interactive Voice Response (IVR-Parlance) system to allow users to interact with self-service options for students and Rec Center guests. | |
| Created a three-phased approach to assist Loyola’s faculty and administrators with interpreting course data to improve student engagement and learning outcomes. | |
| Phase I included 1:1 faculty consultations with a Learning Design Engineer for using the Sakai statistics tool. Phase II began building a model for learning data, joining data from different systems, and creating dynamic reports. |