Business Intelligence (BI/Analytics)

Since completing the initial work on the EDW (Enterprise Data Warehouse) last year which focused on the Education database and University Information System, the Business Intelligence team has continued to advance the BI/Analytics capabilities by adding more data sources to the BI datasets and adding new reporting features.

Disaster Recovery

In 2015, the BCDR Steering Committee approved the Information Technology Disaster Recovery plans. The plans are based on system recovery priorities for the highest level of disaster recovery planning for enterprise systems (Tier I). The University went live with a new capability for students to electronically send their transcripts to Loyola, providing same day delivery and sent at no cost to the student.

Information Security

The Information Security team at Loyola underwent several major improvements in 2015. Security Awareness sessions were conducted across the Lakeside and HSD campuses in an effort to expand the Loyola community's understanding of advanced information security threats and protection methods. These sessions have been well attended by faculty, staff and students and will continue with advanced online capabilities in FY16. Other advancements include a new security event management system (SIEM) that is deployed to centralize logging, streamlining incident response and security investigations. Cyber security attack and intrusion prevention systems (IPS) were advanced using newly acquired software and subscription services from Hewlett Packard (HP). HP published a whitepaper on Loyola's innovative use of its IPS tool Tipping Point. The IPS blocks over 250,000 individual network communication attempts/threats at Loyola on a daily basis.

Other Highlights

Efficiency and security was improved when we added an automated process of updating the Maxxess door security system for doors that control individual academic spaces. Class rosters are used to automatically update the security system each term eliminating a manual time consuming process.

A new password self-service management system was deployed in the spring term. The new system allows for individuals to change their password or unlock their account without the intervention of ITS while adding more conventional layers of security. Using cell phones and alternate email addresses for verification. The new system allows for password changes at anytime from anywhere, further advancing the technology strategy of “Anytime, Anywhere Access”. By the end of the fiscal year over 10,000 individuals had registered with the new system.

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

Outbound Electronic Transcripts

The University went live with a new capability for students to electronically send their transcripts to Loyola to other schools or businesses. The solution, eTranscripts, was a collaboration with Registration and Records, ITS and the vendor, National Student Clearinghouse. Approximately 28,000 transcripts are sent annually. In the first 90 days, over 2800 requests have been fulfilled electronically with less than 12 requiring any manual intervention. Conservations projections estimated that 10% of transcript volume would be in eTranscripts within the next 5 years saving time and mailing costs for the university, providing same day delivery and sent at no cost to the student.

Technology Support for Online Learning

Several technology improvements were made in support of the continued growth of online learning. Some FY15 enhancements included:

- Upgrading Sakai and adding new features including: integrating third party tools such as Panopto and Atomic Learning into Sakai
- Upgrading the Adobe Connect System used for online asynchronous classroom sessions to version 9.4. Improvements include a more flexible interface for the instructor to better assist students during online synchronous sessions.
- Expansion of video-based tools and support.
- A new high in FY15 with 545 total projects. The ITS project portfolio size (effort of projects) has also grown 30% since FY12.

Anytime Anywhere Access

“Technology at Loyola enables me to fulfill my relationship in a simple, secure and seamless way.”

Schedules which are 24/7 in nature (Anytime)

An LUC Community which is mobile (Anywhere)

Straightforward and appropriate access to systems (Access)

Portfolio Summary

The Information Technology Executive Steering Committee (ITESC) has provided ITs governance and project oversight since November 2006. The ITS project portfolio has averaged over 515 projects annually for the past five years and was at a new high in FY15 with 545 total projects. The ITS project portfolio size (effort of projects) has also grown 30% since FY12.
Information Technology Services

FY15 FACTS

Data Centers & Networks
Loyola’s two data centers house 700 devices including servers, appliances, and equipment:
- Over 615 Terabytes of online storage
- 85 physical enterprise class servers and over 340 virtual servers
- 2,425 wireless access points covering 95% of Loyola’s buildings
- 37,000 devices registered on the wireless network
- 3 Gig connection for internet bandwidth
- 31,300 Student Devices Connecting to Sync to E-Mail
- 208 Terabytes of Email storage

Other Facts
- 42 presentations were delivered by ITS staff members at leading technology and higher education venues.
- 5 Staff Members awarded the LUC Commitment to Excellence Award.
- Awarded the 2015 EPFET Purchaser Award. Awarded by the Green Electronics Council for purchasing environmentally safe computer products.

FY15 TECHNOLOGY FEE ALLOCATIONS

Software Maintenance 40%
ResNet Lab Support 14%
Other Technology Refinsh Programs 35%

FY15 TECHNOLOGY FEE ALLOCATIONS

FY16 & BEYOND

MAJOR INITIATIVES - FY16 Q1-Q2

Academic and Faculty Support
- LOCUS Enhancements (5)
- Access Control & Security - Manors (3)
- Clicker Pilot
- Faculty Information System Suite Enhancements

Administrative Initiatives
- Online Performance Management System
- Lawson/Finance Enhancements (5)
- Advancement Systems (2)
- Conference Services Software Evaluation
- Space and Asset Management System Needs Analysis

Infrastructure
- Campus Construction Initiatives (14)
- Information Security Program (11)
- LUSU/LUC/LOD Technology Program (4)
- IT Disaster Recovery (6)

Continuous Service Development
- Residence Intelligent Data Warehouse (2)
- Enterprise Content Management (4)
- Parking Access and Registration Control System - Replacement
- Web Mail Notification and Panic Alerts
- Remove Clear Text Email ID Information from UIS

Initiatives under development include:
- Develop an Online Performance Review process to replace paper process.
- Incorporate LMS metrics into the Data Warehouse to support new institutional initiatives around learning analytics.
- Implement a tutor tracking application for use by the Academic Support Center.
- Replace the existing VPN with Loyola Secure Access (LSA).
- Improves Security architecture and services with a web application fire wall, data loss prevention and secure file transfer.
- Conduct a needs analysis for space and asset management technology.
- Deploy a panic alarm solution to all Lakeside classrooms.
- Install solid-state drives in all Lakeside classroom computers.
- Planned upgrades with significant technology changes:
  - Lawson
  - Oracle
  - WebFocus
  - Student System, LOCUS

TECHNOLOGY SCORECARDS

An annual technology assessment based on the strategic categories is conducted each November. Subjective health ratings are assigned against a pre-defined healthy state to identify strengths and weaknesses as technology requirements evolve on our campus.

<table>
<thead>
<tr>
<th>FTS Scorecard Summary</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16-FY15 Change</th>
<th>Total Change</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic &amp; Faculty Support Scorecard</td>
<td>3.9</td>
<td>3.9</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>0%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Administrative Technology Scorecard</td>
<td>4.4</td>
<td>4.1</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>-1%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Student Technology Scorecard</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
<td>4.7</td>
<td>4.8</td>
<td>1%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Infrastructure Scorecard</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>1%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Continuous Service Improvement Scorecard</td>
<td>3.8</td>
<td>3.9</td>
<td>3.9</td>
<td>3.8</td>
<td>3.9</td>
<td>1%</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Governance &amp; Funding Scorecard</td>
<td>3.9</td>
<td>4.0</td>
<td>3.9</td>
<td>3.8</td>
<td>3.9</td>
<td>-1%</td>
<td>31%</td>
<td></td>
</tr>
</tbody>
</table>

Average Annual Score: 4.0
Year to Year Improvement: 2%