

IS&T's Strategic Projects



The following are IS&T's current major projects that support BU's Technology Plan Strategic Capabilities.

● Learning Quality & Innovation

General Education Projects

These projects are supporting the Operations Subcommittee of the BU Hub/General Education Initiative, which was set up to develop the technology and administrative operations needed to support BU's GenEd initiative. During our first effort, IS&T partnered with the Operations Committee and implemented LeepFrog's CourseLeaf Course Management system. This system supports the review and approval of new course proposals with an easy to use submission form, an approval process and workflow, and course submission progress reports to authorized administrators. With CourseLeaf in place, the Operations Committee and IS&T are working on the other charges to get the BU Hub ready for the fall 2018 semester.



● Research Leadership

EHS Systems Implementation Project

The Environmental Health and Safety (EHS) Systems Implementation Project is improving systems for management of enterprise safety, regulatory compliance, and training, both for research laboratories and Boston University as a whole. This supports the EHS mission to provide a safe environment for students, employees, faculty, and staff as well as patients and others visiting our facilities, and to



help ensure compliance with federal, state, and local codes and regulations. We are implementing the BioRAFT Environmental Health and Safety system, which is replacing many of the functions previously served by our legacy system and providing new functionality. Wherever possible, data is pre-populated from existing sources to reduce administrative burden on researchers. Information is leveraged across areas within BioRAFT to provide EHS with a comprehensive view of Boston University's safety and compliance needs.

Kuali Research

Kuali Research is expanding to include the Proposal Development and Conflict of Interest modules. The Proposal Development module will provide researchers and research support staff a way to electronically create, review, approve and submit sponsored research funding proposals. The new module will also include a built-in budget creation tool and will support system-to-system proposal submissions through grants.gov and research.gov. Integrated with the Proposal Development process, the new Conflict of Interest module will be providing a new and easy way for investigators to submit their disclosures electronically, link disclosures to specific research projects and save financial entity information for future disclosures. These two new modules will be implemented together in a phased rollout, to allow for feedback and improvements along the way.

● Operational Efficiency & Effectiveness

Benefits Enrollment

The Benefits Enrollment project will improve the usability and consistency of benefits enrollment through the implementation of a single solution for employee enrollment in benefits including health, dental, flexible spending accounts, life insurance, and retirement plans. The project team will implement a simplified/consolidated benefits enrollment application, which is a straightforward, highly usable, self-service enrollment process. In addition, this project will implement an online form in the benefits enrollment application for employees to register for qualifying events, submit electronic documentation and include workflow and approvals where required. Qualifying events include, but are not limited to, birth of a child/adoption, marriage, divorce, retirement, etc.

Faculty and Staff eLearning System

Boston University's newest e-learning platform, Terrier Train, will provide faculty and staff with thousands of online training resources, including courses, videos, e-books, and more. Human Resources and Information Services & Technology have partnered to provide a service that will enable faculty and staff to access content on a variety of topics, particularly IT training and general professional development. Terrier Train will provide BU employees with access to online training that is currently available to many of our peer institutions. Managers will have the ability to assign training to their employees, track their progress, and run reports. In the future, faculty and staff will also be able to register for in-person training and take customized BU-specific training via Terrier Train.



MyCV

My CV is a new service to help reduce the administrative burden on faculty members by storing scholarly data in one place. Through partnership between the Provost's Office, the BU Libraries, and IS&T, My CV will provide a repository for the University's academic community to store basic profile information, such as appointments and education, as well as more detailed information, such as publications, teaching activities, grants and professional activities. Wherever possible, the system will be pre-populated with data from both internal and external source systems to save time and reduce the data entry effort for faculty. During our initial rollout, information stored within the system will only be made available to the BU community, however the goal is to leverage the information for public facing websites in the future

Collaboration Across Boundaries

Dropbox License Bundle

Dropbox License Bundle project will enhance current IS&T storage services by making a base allocation of up to 20 BU licensed and regulation-compliant Dropbox licenses available to each major BU unit, with the option to purchase additional licenses at a cost effective rate.

Data Management & Analytics

Academic Data Warehouse (ADW)

The Academic Data Warehouse (ADW) is a reporting service created to support the academic mission of Boston University. The ADW's powerful reporting capabilities provide accessible data to departments, schools, and colleges facilitating analysis of relevant student recruitment, admission, financial aid, registration, and retention data. This analysis enables decision-making to improve yield of the best students, and supports high retention and graduation rates. We are continuing to build out the data available in the ADW by adding Faculty, Graduate and Upperclass Financial Aid, and Outcomes data this year.

● Sustainability & Risk Management

Cashier System Replacement

The Cashier System Replacement project will replace the current mainframe based Cashier system with a third-party vendor cloud based solution which has improved reporting capabilities and provides a better user experience for our families and students. It meets all University requirements for credit card, ACH (Automated Clearing House financial network), check and cash processing. The new cashier system will include the following features:

- Commerce Manager – Cashier sites for Departments
- Payment Plans – Deferred payment plans for Students
- ePay – Online student account ACH & credit card payments
- Student Choice Refunds – Electronic ACH and credit card student account refunds

The Cashier System Replacement provides infrastructure for PCI (Payment Card Industry) compliant credit card processing, reducing Boston University's PCI compliance cost, effort, and risk. After the Cashier system is fully replaced the legacy cashier system will be decommissioned, addressing the long-term viability concerns of the mainframe system.

SAP Hardware Refresh/HANA

The BUworks technical refresh and HANA implementation project replaces the current infrastructure that hosts Boston University's SAP sourcing & procurement, personnel, financial, and payroll information with a modernized, more efficient infrastructure. The project involves installing new servers implementing SAP's next generation in-memory database, HANA. Benefits of

this effort include reduced support cost, increased speed for community members who generate reports and maintain or access SAP data, and increased opportunities for leveraging new SAP capabilities, such as more user friendly mobile applications.



IAM Directory Services

Identity and Access Management (IAM) is the mechanism by which employees, students, and guests are granted access to computing resources and applications. We are enhancing BU's IAM service to ensure University online resources operate more efficiently, effectively, economically and securely. To begin we are reengineering BU's digital directory and accounts. This will provide the foundational platform to support complete account lifecycle management including timely provisioning and de-provisioning of access and entitlements. There is great value in improving the efficiency and end user experience of the identity and account creation and termination processes, including:

- Full automation and workflow to support the creation of accounts/access for computing resources and applications based on HR actions for employees.
- Streamlining guest account creation processes and access to University resources.
- Standardized self-service password reset capability.

Future efforts will expand on this foundation to provide more timely and secure access to additional BU services and online resources.

Student Information System (SIS) Renewal Program

Student information systems facilitate the administrative processes of a student's progress through the university. It enables everything from identifying prospective students, to graduation. This multi-year program will manage a renewal of our student information systems to better serve students, faculty, and staff, and support our academic mission through more efficient and reliable services and a more robust and secure index of student information. Upgraded capabilities and technology will broaden our tools for attracting and supporting students, streamline our operations, improve communications, and reduce risks. This transformation furthers BU's goals for student information systems to be more flexible, secure, and stable.

Integration Platform as a Service (iPaaS) and Student Recruiting System, described below, were the first projects launched in this program. Investigations to determine the direction for new Admissions and Financial Aid systems are underway. Future components will include Core Student Records, Student Accounts, Curriculum, Student Employment, and Data Warehouse updates. Please see the [Student Information System Renewal Program Website](#) for more information.

Integration Platform as a Service (iPaaS)

The main goals of the Integration Platform as a Service (iPaaS) project are to provide a modern, reliable, secure, cost-effective and manageable infrastructure for integrating applications and data hosted both on premise and in the cloud. The chosen solution, SnapLogic, is a cloud-based platform with development tools, integration components, prebuilt connectors and templates that support faster, standardized development of integrations between systems. As the foundation for the Student Information System Renewal Program, the iPaaS will enable more efficient operations, as well as, aid in the decommissioning of mainframe-based applications. This project will also develop and enhance the Integration Services provided by IS&T as this new platform will become the foundation for all system integrations.

Student Recruiting System

The Student Recruiting System project will replace current manual recruiting processes and limited communication tools with TargetX, a Constituent Relationship Management (CRM) application built on the Salesforce cloud-based development platform. This application will enable BU to store prospective student data in one place, to be viewed when needed, and utilized for automated, targeted and personalized, multi-channel campaign communication streams. The

functionality will improve service, increase efficiency, and alleviate administrative burden in several departments including: Undergraduate Admissions, Study Abroad, Center for English Language & Orientation Programs (CELOP) and Metropolitan College. Users will be able to easily set up recurring, multi-day or overlapping events months in advance. Every interaction performed by the prospective student will be captured and tracked against their contact record in order to measure interest in the University. This project also includes replacing Applicant Link, the Undergraduate Admissions portal, with a new Applicant Portal with user friendly navigation, much more personalization, and real time information. The new Applicant Portal will significantly improve service, efficiency, and security. It will allow applicant credentials to be uploaded, and applicants will be able to see their application status, track credentials received and missing, view decisions and send in their response to both admissions and financial aid.



Vulnerability Scanning and Patch Management

These two projects will implement new systems for scanning of BU servers for current system security patches, and software to assist with the implementation of those patches. The deployment of a next generation vulnerability scanning and patch management systems will facilitate the timely deployment of critical patches, reducing the risk of security exposures, and eliminating costly and time-consuming emergency patching events.

Web Front Ends to the Cloud

The Web Front Ends to the Cloud project will retire the existing www.bu.edu “front end” servers that act as a gateway to BU public web content, and replace them with cloud based servers. The main benefit of this project is that the www.bu.edu web site will remain active and available, even if there is a data center outage on campus. In addition, changes and updates can be made to the home page in the cloud environment during an unexpected event or disaster. Having the web front ends in the cloud will also allow for “auto-scaling” to handle high volume traffic to our public website during events such as web registration and the applicant drop.

