University of Massachusetts Boston Information Technology



Project Management Office FY23 Year-End Report April – June 2023

Contents

Executive Summary	
Purpose	
The Information Technology Project Management Office	
Portfolio Highlights	4
Project Activity	
Projects Completed	11
Data Integration	15
FY23 Project Portfolio	18

Executive Summary

Purpose

The Information Technology Project Management Office (IT PMO) Quarterly Report provides the University community with insight into the activities and actions of the Office throughout the portfolio's life. The intent of the report is to inform, update and describe important milestones for the strategically selected initiatives that comprise the portfolio and activities of the Project Management Office.

The Information Technology Project Management Office

The Office was created by the Vice-Chancellor of Information Technology and Chief Information Officer to address an urgency of need and to implement a critical component to the overall vision of the Information Technology strategic roadmap.

The project management office has a five-year maturity plan designed to increase the office's functionality through the development and implementation of critical project management business processes, tools, and methods.

The mission of the IT PMO is two-fold:

- Guide projects to a successful conclusion.
- Create a foundation for consistent project management.

In support of that mission, the IT PMO has five primary objectives:

- Deliver successful technology projects.
- Build Project Management maturity across the IT organization.
- Serve as the organization's authority on IT Project Management methods and practices.
- Mentor and guide project teams as they learn and adopt project management best practices.
- Fully implement the project portfolio management system that will support strategic planning, project integration, effective resource allocation, and executive reporting

Portfolio Highlights

Projects that comprise the FY23 portfolio are selected based on the critical nature of the requirement, strategic alignment with university goals and objectives, and the profile of the initiative. Project management resources are allocated based on these criteria and are also influenced by the project type (PMO managed projects or PMO partnership managed projects), complexity (very complex, complex, or standard) and category (lifecycle, recurring, or bridge). Life cycle projects start and end within the fiscal year of the portfolio. Recurring projects start and end within the fiscal year but are included in all portfolios as improvements and\or enhancements. Bridge projects start and end dates span multiple portfolios.

<u>Name</u>	Project Type	<u>Complexity</u>	Category	<u>Status</u>
AV Upgrade Program	Partnership	Standard	Recurring	Complete
Azure Password Management	PMO	Complex	Lifecycle	Complete
Cloud Strategy 2.0	PMO	Complex	Lifecycle	Active
Document Imaging	PMO	Very Complex	Bridge	Active
Enable Inclusive Identity - SA (Student	PMO	Very Complex	Lifecycle	Complete
Administration)				
Enable Inclusive Identity - HR	PMO	Very Complex	Bridge	Active
Financial Aid Excess Award	PMO	Complex	Lifecycle	Complete
Guest Registration	PMO	Complex	Lifecycle	Complete
HelioCampus	PMO	Very Complex	Bridge	Active
Information Security Improvements	Partnership	Complex	Recurring	Complete
IT Asset Management Intake	PMO	Very Complex	Lifecycle	Active
IT Start of Semester	Partnership	Standard	Bridge	Active
Modern Authentication	PMO	Very Complex	Lifecycle	Complete
Network Core\Edge Upgrade	PMO	Very Complex	Bridge	Active
Network Wireless Upgrade	PMO	Very Complex	Bridge	Active
NG-911	PMO	Very Complex	Bridge	Active
Public Safety Communications	PMO	Very Complex	Bridge	Active
Residential Housing Integration	PMO	Standard	Lifecycle	Complete
Rubrik Backup & Recovery	PMO	Very Complex	Lifecycle	Complete
Window 11 Migration	Partnership	Standard	Bridge	Active

Project Activity

Throughout the portfolio lifecycle, individual projects will reach milestones critical to the overall success of the implementation. Below are high-level project descriptions and status of all **active projects** within the 4th quarter of the FY23 portfolio.

Cloud Strategy 2.0 (July 2022-December 2023)

The Cloud Strategy 2.0 project focuses on the development of a training program and series of environmental assessments (hardware, software, staffing) designed to create a team charged with the design, development and support of all components comprising the UMB (UMass Boston) IT Hybrid Cloud environment. The assessments will provide critical metrics to help determine the ratio required to maintain the maximum security, efficiency, and effectiveness of our on-prem vs. cloud deployments.

Status:

- In the Fall of 2022, the project team completed the initial Microsoft Foundations
 Assessment, a comprehensive monitoring of current systems traffic and general activity.
 Microsoft engineers provided results of the assessment and the project team execut4d
 the action steps to respond to the recommendations and begin the 'next steps' toward
 the Landing Zone Assessment. The goal is to leverage the recommendations when
 considering the strategic design of our hybrid cloud environment.
- The project team is currently engaged in a weekly discovery\pre-design session with Microsoft engineering team to determine key decision points that will influence the UMass Boston overall Azure architectural design. Completing the Landing Zone Assessment will help the campus identify and develop the requirements for our scalable landing zone based on five proven architectural design principles. The assessment will evaluate the management capabilities needed to design, develop, and manage cloud infrastructure and the creation of a prioritized action plan for next steps.

The project is currently tracking to schedule.

<u>Document Imaging</u> (December 2022-May 2024)

The current multi-campus document imaging application (Boston, Dartmouth, and Lowell) used by the Boston Financial Aid, Registrar and Provost office is at the end of lifecycle and no longer supported by the vendor. To replace this application a multi-campus team has been charged to review and procure a new application and perform the design, development, and implementation of the new platform.

Status: UITS (University Information Technology Services) has established a multi-campus project governance structure, working committees and project team focused on the requirement gathering that will lead to vendor product demonstration and vendor selection. The team is in the process of business discovery.

The project is currently tracking to schedule.

<u>Enable Inclusive Identity – HR</u> (Feb 2023 – December 2023)

Following the lead of the Enable Inclusive Identity SA project, the Enable Inclusive Identity HR project shares the same fundamental goal to provide our faculty and staff members with a respectful, seamless, and welcoming experience. To support that objective the HR project will introduce 3 'identity' components to enable our community to best reflect who they are. Those values include chosen name, sex, and pronouns (sexual orientation and gender are in consideration for a future phase of the project). The project will initially introduce these values within the Peoplesoft Human Capital Management (HCM) application and then expand, adding these values to targeted downstream applications. It is especially important for the purpose of continuity of experience that we are consistent with these values across all major platforms accessed by our staff and faculty. Phase 2 of the project will focus on the design and development of downstream integration requirements.

Status: The University project team has completed the design and development phases of the project. The campus specific teams are currently planning campus readiness tasks (communications, training, deployment).

The project is currently tracking to schedule.

HelioCampus (September 2022-December 2023)

In adherence to our mission, the university is mandated to provide the best education and maximize opportunities for our students through the implementation of strong academic programs, which requires providing Deans and all executive leaders with data and analytics to manage the achievement of our institution's goals. HelioCampus is a best practice platform for providing the data warehousing and analytics necessary to enable a holistic, data-centric approach to track, measure, and manage institutional data. The application will increase the visibility into admissions, enrollment, and retention data to drive student success and revenue. HelioCampus will also enable our continued adherence to required state and federal reporting of institutional data.

Status: The project team is now active in all projects related tasks and has accomplished a number of important milestones in a short period of time.

- The team has distributed the project charter to all project stakeholders, team members and other interested community members.
- Functional and technical kickoff meetings have been successful in the dissemination of important project tasks and timeline overviews.
- The technical build, including the implementation of secured authentication and the integration of the source data from Peoplesoft is complete.
- Business process 'discovery interviews' with subject matter experts has been completed.
- The team is currently targeting the completion of data validation for the end of July and will begin dashboard validation in early August. Training and deployment are targeted for late September. The project is currently tracking to schedule.

IT Asset Management Intake (July 2022-August 2023)

The UMass Boston community has technology demands, specifically laptop computers, servers, tablets, and desktop computers that are critical tools for their purpose and function within the University. The support of this demand is a fundamental component of the IT Computer Lifecycle management strategic plan. Ensuring our faculty, staff and students have the technologies they need requires IT to manage the lifecycle of these assets, from procurement to decommissioning. The project will develop a new business process and data integrations that will empower IT as the asset custodian to perform lifecycle management of all IT Assets (laptops, servers, tablets, and desktop computers).

Status: The project team has completed the design, development, testing and implementation of a complex, highly automated, multi-departmental business process that includes several integrations to support data integrity and efficient and effective business processes.

The project is currently in the stabilization phase and tracking to schedule.

IT Start of Classes (April 2023-October 2023)

The beginning of any semester is a challenging time for faculty, students and staff with many activities, new schedules, new places to be (1st year students) and new friends to be made. IT resources and support services are in place to ensure our community this experience is as positive as possible by ensuring there are no IT related interruptions in the continuity of the experience.

The project team is charged with the design of a 'start of classes' template of all IT departmental tasks that will be coordinated across all IT departments in preparation for the start of classes for each semester.

Status: The project team has regularly scheduled mtgs to review the design and implementation of the start of classes template. The project is targeting Fall 2023 and is currently tracking to schedule.

Network Core\Edge Upgrade (July 2022-September 2023)

The University of Massachusetts Boston campus relies on a campus-wide network for all academic, research and business technology communications needs. This network provides wired and wireless network access for all campus desktops, servers, computer labs, wireless access, research computing, building management systems, door locks, video cameras and internet access.

The existing network is at the end of life and end of critical manufacturer support (7-9 years old). This legacy network consists of various hardware and software components and support services, which are supplied by the OEM (Original Equipment Manufacturer) and VAR (Value Added Reseller)- which no longer will be available. This presents a tremendous risk to our campus administrative, academic, research and business continuity. In addition, due to the age of this equipment, we are limited to non-optimal lower bandwidth capabilities (10G, 1G) throughout the network.

To resolve these issues and keep pace with current and emerging technologies, while also providing a future state network for the campus-UMB is undergoing a campus-wide network upgrade. We will be replacing all end-of-life equipment with new current network technology hardware as well as implementing new software management tools which have security capabilities for better visibility and proactive monitoring.

Status:

- Wheatly bldg. equipment received by UMB -being installed/cutover August.
- Data center equipment is on site.

The project is currently tracking to schedule.

Network Wireless Upgrade (November 2022-December 2023)

Mobile devices are the leading technology used by our community to connect to the internet, email, social media etc. A project team has been charged to review, design, and implement a state-of-the-art wireless technology upgrade expanding upon the current footprint to include outdoor access in common areas. The project's purpose is to upgrade current equipment to provide a reliable consistent experience when connecting via a mobile device.

Status

- Network team proactively cabling buildings to speed installation of new wireless access points
- ClearPass hardware and UXI sensors received continue to pilot/test.
- 1000 new Access Points are targeted to be installed across campus starting the week of August 24th through September.
- QUAD Network/Wireless install estimated to be late 2023.
- Sub-contractors were secured to assist in the deployment of new endpoints.

The project is currently tracking to schedule.

NG-911 (July 2022-August 2023)

Emergency communications for the University are critical and must include an infrastructure and communication technologies that are state of the art, adhere to security standards best practice and are dependable providing as much information as possible to 1st responders. In addition, the University must also adhere to and comply with state and federal FCC (Federal Communications Commission) communication compliance regulations. A project team has been charged to identify and implement the next generation 911 technologies (NG911). The goal of the implementation is to increase the communication, response, and coordination of emergency services between the campus police and emergency service providers.

Status: The project team has completed their work with the vendor partners and a tentative go-live date is targeting early August.

The project is currently tracking to schedule.

Public Safety Communications (July 2022-July 2023)

The current UMB Public Safety Communication System is approximately 25 years old. The system is analog, end of life and not supported by the original vendor. In addition, the system does not meet current Project 25 (P25) compliance standards.

P25 is a set of standards for emergency responder equipment and systems which provides increased performance, efficiencies, capabilities, and quality. These P25 standards are provided through a joint effort with Association of Public Safety Communications Officials (APCO), National Association of State Telecommunications Directors (NASTD), Federal Communications Commission (FCC) and the Telecommunications Industry Association (TIA).

A project team has been charged to identify public safety communication requirements, work closely with UPST (Unified Procurement Services Team) to procure the necessary equipment and lead the implementation to install and operationalize the communications equipment.

Status:

- 95% complete- connection, configuration, and testing
- Two new antennas are installed operational.
- Cutover scheduled 10 AM EST Wed August 2
- Project is tracking to schedule.

Windows 11 Migration (June 2022 - December 2024)

UMass Boston's Information Technology Services Division is responsible for the lifecycle management of all University owned servers, desktop and laptop computers and tablets. The Microsoft Corporation recently announced the end of support for their Windows 10 OS system as they transition users to the new Windows 11 OS – targeted for Spring 24. The maintenance cycle for these assets is tied directly to the status of the vendor product.

Status: The project is currently analyzing and categorizing historical inventory data to determine feasibility of use.

The project is currently tracking to schedule.

Projects Completed

Portfolio projects that are successfully implemented (highlighted in green on the Portfolio report) have completed the project task and requirements including the completion of a formal project closeout. Completed at the end of stabilization, the project closing document represents the project's completion.

AV Upgrade (July 2022-June 2023)

This yearly program manages and maintains our classrooms and lab with the latest technologies, critical for our students, faculty, and staff. The FY 23 project will target multiple TEC, classrooms, and labs to be upgraded.

Status: Below are the FY23 target rooms for upgrade. AV vendors have been engaged with onsite meetings started in early November to begin the assessment, design, engineering, and equipment list for these rooms. The project is currently tracking to schedule.

- Upgrade AV System in Chancellor's Conference room to support Hybrid Meetings. The
 purchase order has been awarded to CCS Presentations, awaiting an update on product
 availability and installation date from the vendor, target is still for June or July of 2023.
- Upgrade AV System in ISC (Integrated Sciences Complex) Room 3300 to support Hybrid Meetings. Due to other higher priority demands we are putting this AV Upgrade on hold for FY23.
- Replace Lamp Projectors on the 4th floor of UH with laser projectors. 4 new projectors in FY23 to replace four projectors in a couple of the UH Classrooms. We have also used some existing laser projectors we had in stock to replace 3 small room lamp projectors in UH.
- Replace out of compliance wireless microphones on campus with new digital models.
 We have issued the purchase order for these microphones and are awaiting product delivery, which has been delayed due to supply chain issues. On target for a completion date of June 2023.
- Build Out 2 additional BeaconFlex Classrooms. We have identified the two rooms we
 plan to install BeaconFlex Technology in this summer, M02-0116 and W01-0034 and
 have submitted the equipment lists to the vendor and are awaiting their quote. On
 target to have this work completed by June of 2023.
- New use of AV Upgrade and AV Refresh Funding We will be replacing AV switch and controllers in two spaces (UH 1100 & UH 1300) and will use any remaining funds to purchase laser projectors and classroom computers as needed.

The project team has completed all the requirements outlined in the charter document. The project is complete.

<u>Azure Password Management</u> (April 2023 – June 2023)

The project team researched the comprehensive Microsoft Identity Management application (MIM – account provisioning, account claiming and password management) and determined that it is not feasible to implement the full suite. Instead, to provide a more secure method of password management the project team will work closely with UITS to decouple the password management component of the current custom account claiming and password management application. At the same time, the UMB IT project team will work closely with Microsoft engineering to design and deploy the Azure password management functionality independent of the account provisioning and account claiming functionality of the MIM. The Azure Password Management initiative is a critical part of the Cloud Strategy 2.0 initiative.

Status: The project team successfully completed all tasks and deliverables as described in the project charter document. New students are now using the custom applicant claiming application and current students needing to manage their password are using the new Microsoft password management functionality.

The project team has completed all the requirements outlined in the charter document. The project is complete.

Enable Inclusive Identity – SA (July 2022-October 2022)

UMass Boston is a dynamic, culturally diverse, and inclusive community that strives to always provide our students, staff, and faculty members with a respectful, seamless, and welcoming experience. To support that objective the Enable Inclusive identity SA project will introduce 5 'identity' components to enable our community to best reflect who they are. Those values include chosen name, sex, pronouns, gender, and sexual orientation. The project will initially introduce these values within the Peoplesoft Student Administration application (Wiser) and Blackboard and then expand, adding these values to targeted downstream applications. It is especially important for the purpose of continuity of experience that we are consistent with these values across all major platforms accessed by our students. Phase 2 of the project will focus on the design and development of downstream integration requirements.

Status: The project team have completed all requirements outlined in the charter document. The project is complete.

Financial Aid Excess Award (July 2022-February 2023)

Residential students that have excess financial aid awards typically apply those excess funds to any residential housing balance they may have. Currently the University mails an excess fund check to the student who then writes a check for the same amount and mails it to the residential billing office. The Financial Aid Excess Award project will design and implement a custom process to provide residential students the opportunity to 'automatically' have any excess funds applied to their housing balance. The project was implemented in 3 consecutive phases.

Status:

- Phase 1 of the project was completed in early July 2022 and provides the ability of the students to 'electronically authorize' the university to act on their behalf regarding the allocation of excess funds to their residential balance.
- Phase 2 of the project was completed in September 2022 and provides the bursar with a report providing all the variables required to 'approve' an excess fund transaction.
- Phase 3 of the project was completed in February 2023 with automation of targeted business processes.

The project team has completed all the requirements outlined in the charter document. The project is complete.

<u>Information Security Improvements</u> (July 2022-June 2023)

The University is in constant motion to provide and manage proactive technologies and best practices to eliminate any data security threats to the University and its Community. The UMass Boston Information Technology Security Office implements a yearly information security improvement program aimed at providing the latest security tools, education and training for our students, faculty, and staff.

A full year project the security improvement initiatives is designed to ensure our university security profile, guided, and assessed by an annual audit and a pen test - including Azure SSO, IPAM (IP Administration and Management), MFA (Multi Factor Authentication), SIEM.

Status: The project team have completed all requirements outlined in the charter document. The project is complete. For detailed activity information you can access the information security website here https://www.umb.edu/it/security.

Residential Housing Integration (July 2022 – February 2023)

• Information managed within the StarRez residential housing application (contract complete, room type and costs) serves as an important variable in the calculation of financial aid for residential students. However, because this information is not available in our authoritative system (Peoplesoft), it requires several time-consuming manual processes to provide this data for our financial aid office to consume in their financial aid calculations. The project team is charged with design and implementation of a new data integration\business process between StarRez and Peoplesoft that will enable the Financial Aid staff access to this housing data via the Peoplesoft\summit application.

Status: The project team have completed all requirements outlined in the charter document. The project is complete.

<u>Guest Registration</u> (July 2022-March 2023)

• The UMass Boston campus-based non-degree application process (referred to herein as Guest Registration) currently provides a 'shopping cart' experience for students to submit an application. Outside of the application form, all processes behind the scenes are manual, including the addition of the data to Peoplesoft, creation of a student record and enrollment of the actual course. The Guest Registration project will design and implement a process focused on the efficiency and effectiveness of the process and student experience. The goal of the project is to implement a near-real time transactional process to automate the application form, submission, and enrollment.

Status: Due to unforeseen resource constraints, the project sponsor closed the project to revisit when resources become available.

Modern Authentication (July 2022-March 2023)

• Secure authentication (modern authentication) is a key component to the UMass Boston IT Cloud Strategy 2.0. The modern authentication project is charged with the migration of all UMB application authentication processes to the Azure Active Directory. The project will provide a standard logon process, increase security via the implementation of multifactor authentication and reduce user frustration by introducing Single-Sign-on capability for all major applications. The SSO capability enables a user to log on once and all other related applications will not require logon credentials. **Status:** The project team have completed all requirements outlined in the charter document. The project is complete. 80+ applications were migrated from the shibboleth server or UITS SAL environment directly to the Azure Authentication platform.

Rubrik Backup and Restore (March 2023 – June 2023)

A project team has identified the Rubrik software application as the replacement for the current Commvault backup and restore application. The Rubrik product secures our university data from insider threats or ransomware with air-gapped, immutable, access-controlled backups. Rubrik technology continuously monitors data for ransomware, manages sensitive data exposure, and hunts for indicators of compromise. The Rubrik software will enable IT to recover critical university apps, files, or objects while avoiding malware reinfection surgically and rapidly.

Status: The project team have completed all requirements outlined in the charter document. The project is complete.

Data Integration

The Project Management Office is responsible for the design, development, and implementation of campus-specific data integration as part of formal projects and\or as standalone initiatives. The team resources have been expanded to now include two data integration specialists that work closely with project managers to complete any project integration requirements.

The integration team's skills and expertise have enabled the Boston campus to lead in several integration initiatives. The team's ability to work with innovative technologies and deliver functionality not previously available is a credit to the team. Several of the Boston Boomi development\designs, particularly in the Slate technology space, have been shared, and are in use by the Dartmouth and Lowell campuses.

Project activities

<u>Residential housing integration</u> – status is complete.

- StarRez to Peoplesoft integration to provide financial aid access to room type\fees.
- Summit to StarRez integration to provide change data regarding inclusive identity.
- Slate to StarRez integration will modify the current integration to pass only new records vs the current process of passing comprehensive files.

IT Asset Management – status is active

- Buyways to ServiceNow integration to capture, at the point of approval IT asset data that will create a new record in ServiceNow.
- Property to ServiceNow integration will provide 'safety' net to capture non-Buyways procurement (grant funded procurement).
- ServiceNow to PeopleSoft Asset Management once IT provides a user with their IT asset a file is sent to Peoplesoft and loaded into the Asset Management module.
- Custom 'IT Asset Request' form that will have SSO authentication and API
 connectivity with SN to assist in the management of IT asset inventory and provide
 IT service desk the data and workflow necessary to deliver inventoried assets.

<u>Document Imaging</u> – status is active

 The integration team are engaged as individual contributors to assist with any new integrations required of the new document management platform (i.e., Slate, Peoplesoft). The project has completed the initial kickoff meeting and resources and timeline are being confirmed.

TutorTrac – status is active

 TutorTrac is a software application (vendor is Redrock) designed to match students seeking tutoring in specific subjects to be matched to tutors of that subject. In addition to the 'matching' function the application also provides calendar scheduling and details reporting functions that can assist in the recruitment of tutors. The data integration team is active in designing and implementing the application data requirements.

Tevera – status is active

• Tevera is a cloud-based application platform to provide field placement, assessment, and placement for CEHD (College of Education and Human Development) students.

<u>Slate to PS Inclusive Identity data integrations</u> – status is active

 Slate is collecting identity data from the common application and native Slate application. This data integration will be uploaded to the PS application at the point of matriculation.

Development activities

Boomi Manage Cloud Service – the data integration team continues to build out the UMB Boomi tenant space and have operationalize the development and production environments. The team developed several complex application specific workflow processes within the Boomi application that are considered mission critical to the hosting office (i.e., Slate, Salesforce (ACM)).

The team is in the planning stages to begin development of the new Boomi space (Flow) that will provide forms development, integration, and associated workflow from the Boomi MCS platform. The team's ability to leverage these new tools will be reflected in their designs' efficiency and effectiveness.

The Boomi workflow process inventory includes applications such as Slate, Salesforce (ACM), and IT Asset Mgt. The team continues to develop the MSC space and push the API connector technology to replace the csv file transfer processes.

Operational Activities

The data integration team is responsible for the operational management and support of numerous application platforms including supporting the 27 integrations of the Slate application, student, and financial integrations for the Salesforce org (ACM) and residential housing integrations.

FY23 Project Portfolio

INFORMATION TECHNOLOGY

