

IT Annual Report 2024

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The cover image was captured using a 360 camera by our talented students in the IT Student Photo Project. To explore more amazing work by our student photographers, visit our photo blog at blogs.umb.edu/it-photo.

Welcome from the CIO

As the Vice Chancellor and Chief Information Officer of the University of Massachusetts Boston, it is my privilege to present you with this FY24 IT Annual Report.

Our dedicated team is committed to providing reliable and secure technology, services, and solutions that support the university's diverse population of students, faculty, and staff. We continuously strive to improve scholarship, teaching and learning, research, and business processes to enhance student success and uphold the mission of our esteemed institution.

What follows reflects past, present, and future through notes of praise for a job well done, by listing and recognizing recent major IT accomplishments, and by acknowledging the fledgling "One IT" strategic partners program; all of which reinforce the key role that IT plays in enabling and advancing student, faculty, and staff success.

I am proud of the accomplishments outlined in this annual report and appreciative of everyone who contributed.

This report truly reflects "One IT" campus wide reinforced by tangible real-world outcomes. Special thanks to everyone involved in IT service delivery at UMass Boston past, present, and future.

Sincerely, Raymond V. Lefebvre Vice Chancellor and CIO University of Massachusetts Boston

MISSION VISION& VALUES

MISSION

Information Technology Services (ITS) provides a diverse population of students, faculty, and staff with reliable and secure technology, services, and solutions to continuously improve scholarship; teaching and learning; research; and business processes to enhance student success and support the mission of the university.

VISION

To be a trusted partner in providing secure, transformative, and innovative Information Technology services to advance teaching, learning, research, and administrative practices through dynamic and adaptive customer service.

VALUES

UMass Boston IT Services is committed to the values of:

CARING



We interact with students, faculty, and staff with respect, empathy, and professionalism.

INNOVATION



We value creativity and critical thinking, focusing on developing efficient, effective technology services and solutions.

DEDICATION



We are committed to the mission of the university and the people we serve, and we work hard to ensure successful outcomes.

INCLUSION



We embrace our differences to provide the best service to a diverse UMass Boston community.

COLLABORATION



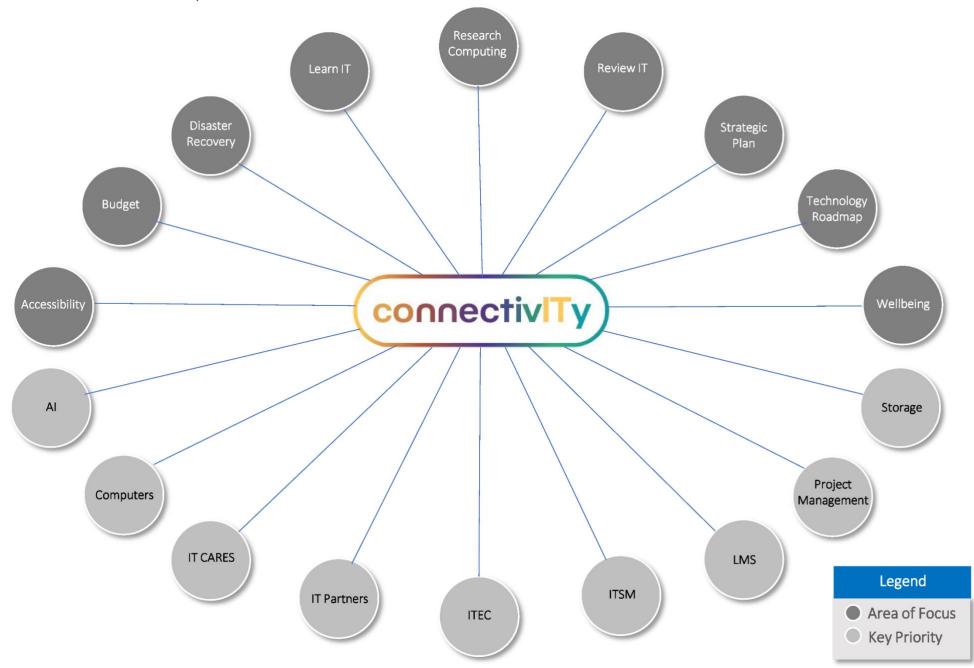
We work together to implement new services and technologies to solve problems and improve the quality of life for all.

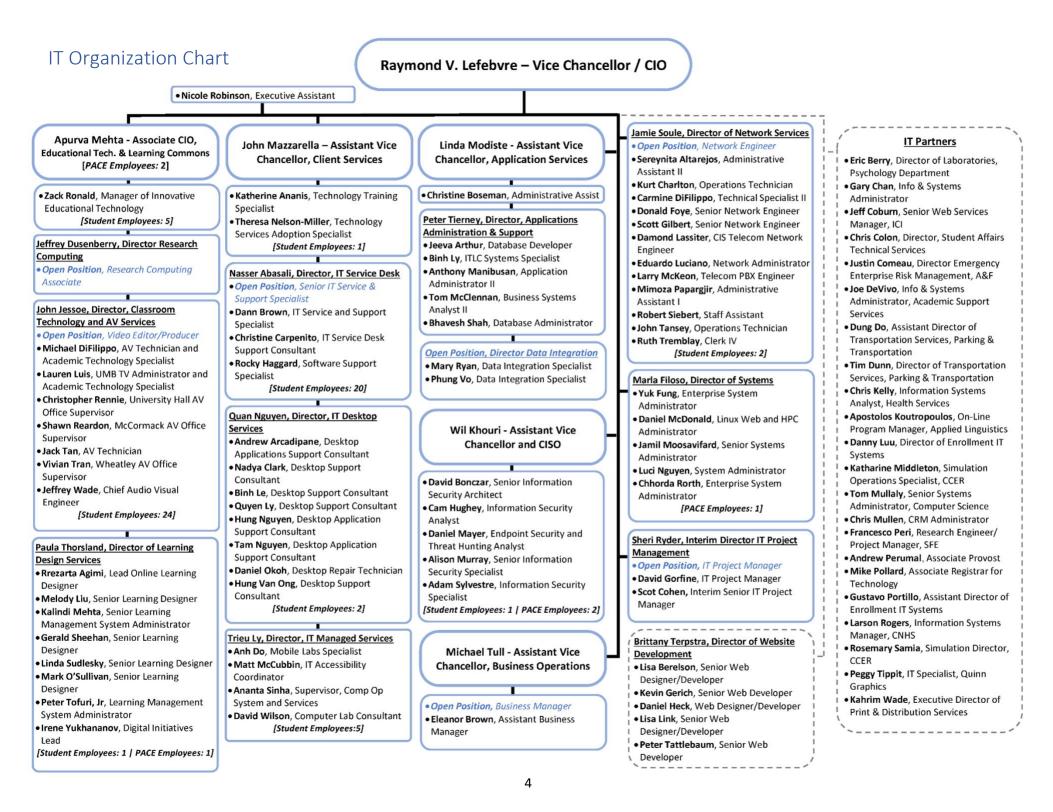
EXCELLENCE



We strive to provide high-quality service and support to our community of students, faculty, and staff.

Areas of Focus and Key Priorities





Departmental Introductions

The following is an introduction to each department and group in the IT Services Division.

Educational Technology and Learning Commons Department

The Educational Technology Department is comprised of three groups: Learning Design Services, AV & Classroom Support, & Research Computing. Together they provide pedagogical and technical support to enhance teaching and learning, both online and face-to-face as well as support faculty in their Research Computing needs.

Technovator

The Technovator is a hub for faculty, staff, and researchers to work with IT to discover new and exciting technologies to enhance the learning and student experience. The purpose of the facility to is to work directly with faculty, staff and researchers to discover new technologies and possibly pilot the technologies for their courses or elsewhere on campus to enhance the student experience.

Research Computing

The Research Computing group supports the computational needs of researchers not traditionally met by other administrative functions. The group administers, supports, and brokers High Performance Compute (HPC) resources and training. In addition, the group supports more localized resources such as storage servers, workstations, dedicated and specialized applications, and acts as a liaison between researchers and other IT departments.

Classroom Technology and AV Services

Classroom Technology and AV Services provides services and access to equipment and facilities related to the use of instructional technology in the classroom. In addition, AV Services provides media support for non-classroom events such as functions, conferences, seminars, etc. The department also maintains and services over 200 Technology Enhanced Classrooms (TECs), Conference Rooms, Labs, and Auditoriums on campus.

⁶⁶ Thanks again to John Jessoe and your team for doing your usual great job at the Chancellor's Distinguished Faculty Awards Lecture yesterday.

–Joseph B. Berger, Provost

Learning Design Services

Learning Design Services is a group helping faculty integrate technology into their teaching and engage their learners, by providing highly personalized technical and pedagogical support about various online educational practices and digital tools. LDS champions research-backed effective practices in online, blended, and on-campus environments to make

learning accessible, active, and equitable for all students. Through collaborative work with faculty and other stake holders on campus, we design and facilitate consultations, workshops, webinars, and cohort-based professional development opportunities to faculty and academic groups based on their teaching needs and students' academic goals.

Client Services Department

The IT Client Services Department is comprised of three groups: IT Service Desk, Desktop Services, and Managed Services. Together, they are responsible for the effective delivery of support for all of IT's services, either solving client issues directly, or coordinating Apurva, Paula, Effie, Sarah, Karen, Kalindi, Peter! It takes a village and you are the village Dream Team. I cannot express the gratitude I have for all of you in helping me deal with the teaching emergency today. Having an instructor resign without notice has been very concerning for the students (some of whom were in both classes), and without you I would not have been able to get access to Blackboard or Wiser, nor have any content restored. Your responsiveness blew me away...Our students are much better positioned today because of you.

-Nardia Haigh, Ph.D., Associate Dean and Associate Professor, College of Management

with other support staff throughout IT. In addition to supporting client computer issues, with the Lab Operations group, all campus computer labs, many computer-based classrooms, and related services are operated and supported.

IT Service Desk

The IT Service Desk is the front desk of IT — the first point of contact. We handle password changes, confusion on how (and when) to access UMass Boston systems, software distribution, basic security issues like compromised accounts, and other general IT questions. We maintain the Self Service Portal with its knowledgebase of support articles and oversee the new chat services. And if we can't handle it, we route it to the people in IT and beyond who can.

•• I had a really frustrating IT issue with a document and received amazing help from your staff: Lucille Nguyen and Dann Brown. It took them over an hour to fix my issue and they patiently worked until it was resolved. I couldn't have done it without them and really appreciate their help! Fantastic!

-Angela Gates, FNP-BC, MSN, Clinical Lecturer, Accelerated Bachelor of Science in Nursing (ABSN) Program

Desktop Services

IT Desktop Services provides on-campus and remote technical support for Windows and Mac computers, to faculty and staff, and collaborating with partners in other groups within IT and technical support staff from other departments.

There are three team members dedicated to providing weekend service to VIPs such as the Chancellor and Provost. The Desktop team uses endpoint management tools for computer inventory, and to remotely install and update applications to university computers. We also plan, coordinate, and execute the Computer Lifecycle Management program to provide computers to employees and securely dispose of old ones.

Managed Services

Managed Services oversees the twelve shared teaching labs, Mobile Classroom technology, the Student Printing Service, and Microsoft Virtual Desktop environments. Our team also includes management of the Adaptive Computer Lab, including •• I wanted to personally let you know what amazing service I had from Tam Nguyen this morning. I am so thankful he was able to help me. On Tuesday I made a completely idiotic mistake and I "emptied" my sent mail folder. Before I realized what had happened, all of my 2024 and 2023 sent emails were gone. I immediately got on the IT chat but the student working at that time was not able to help me. They filed a ticket, and I worked with Tam this morning. I'm so relieved...I believe all of my sent mail messages are back. It seems crazy to be so worried about sent mail, but I often have to search to say "yes, in fact we notified you on xx date" or something similar. I was terrified that I had a black hole for 2 years. Tam was very patient and very thorough. I sincerely appreciate it.

–Jennifer L. Gregg, Ph.D., Associate Dean, CLA Professor, Communication

accessibility testing for campus technology systems. We also provide support services for the Library IT. Additionally, we enter into short term and ongoing support partnerships with other university departments for their computer needs including updates of department owned labs, support of technology roll out plans, Chromebooks, and other more complex IT services. Finally, we work with clients to leverage ITS Services to solve problems in their areas.

Technology Services Adoption

The Tech Services Adoption team is responsible for managing all the ways that the UMass Boston community learns about, and learns to use, the services offered by IT. The group coordinates with IT's service owners and project managers to plan and execute marketing campaigns to promote use and awareness of new and existing IT services, create strategies and procedures for the effective sending of broadcast email communications about news and service alerts to existing clients of these services, and oversee the creation and delivery of client training offerings on these services.

Application Services Department

The Application Services departments is comprised of two groups: the Applications Administration & Support group provides technical and administrative support for software applications specific to the use by the Boston campus, as well as administrative and access control support in conjunction with the President's Office for UITS hosted applications.

Applications Administration & Support

Application Administration and Support manages applications that are used by everyone at UMass Boston. We offer many services used across the campus, some of the primary ones are listed here: Help manage student, employee, and

financial records (WISER, HR Direct, BuyWays, and Finance), scheduling classes and events (25Live), enhancing communication with the community (EMMA), signing legal documents remotely (DocuSign), storing and accessing files from anywhere (OneDrive), alerting the community in times of emergency (Alertus, Rave), and access to applications simply and securely (IDM/SSO).

Information Security Office

The Information Security Office (ISO) coordinates efforts and provides services to protect the university's information assets, and computing and networking infrastructure. The ISO staff provides consultative services, incident response coordination, policy and procedure development, fraud and forensic investigations, awareness and training, penetration testing, cybersecurity risk governance, and regulatory compliance. The ISO staff also serves as the pivot for many cybersecurity services operated by other teams, including authentication, access control, centralized logging, email security, data loss prevention, anti-malware management, endpoint and patch management as well as supporting the university's payment card industry (PCI) regulatory compliance obligations.

Business Operations

The Business Operations group is responsible for IT's financial management/forecasting and reporting, personnel and space management, and oversight of the procurement process for IT's goods and services.

Project Management Office

The mission of the Project Management Office is to guide projects to a successful conclusion and to create a foundation for consistent project management. In support of that mission, the 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. And fully implement the project portfolio management system that will support strategic planning, project integration, effective resource allocation, and executive reporting.

Network Services

The IT Network Services group provides network, telecommunications, and critical technology facilities services to all UMass Boston faculty, staff, students, and all campus building technology facilities. Some of these services include campus wired network and wireless services, campus voice, voicemail, and contact center services, campus critical facilities and cable plant maintenance and management, and UMass NET ISP services.

Systems

The IT Systems group is responsible for the administration and management of the core IT services provided to the students, faculty, and staff of the university. These core services include email, active directory administration, Microsoft O365 administration, server management and administration (physical and virtual), administration and management of the virtual desktop service CloudPC, along with many other mission critical services. This group has a diverse skill set with decades of experience that positions the university well to deliver new future state solutions to the university at large.

IT Partners

New this year, IT Partners represent embedded business professionals with extensive IT backgrounds, skills, and responsibilities within their respective business units. IT Partners represent a natural extension of central IT services, are considered part of the "One IT" team and fulfill a critically important IT liaison role in support of students, faculty, and staff.

Year In Review

Technovator

Virtual Reality Simulation: A groundbreaking pilot was conducted for the Nursing Department and CCER, utilizing Virtual Reality Simulation to enhance educational experiences.

ArtSteps for Art 224: This innovative pilot allowed students to create their own Virtual Art Gallery, complete with walls, floors, and art displays, fostering creativity and digital proficiency.

Curricular Integration: Virtual Reality education has been seamlessly incorporated into the Biology and History programs, offering students a more immersive learning environment.

Al Guidance for History: The History Department was provided with expert guidance on the adoption of Artificial Intelligence (AI), benefiting both faculty teaching methods and student learning outcomes.

ThingLink 360 and AR Tour: A pilot initiative featuring ThingLink 360 and AR Tour and Education creator tools was launched, expanding the frontiers of interactive and engaging education.

Makerspace

Student Certification Program: An innovative Student Certification Program has been implemented, with over 300 students participating in this peer-led, student-designed educational initiative.

Prusa MK3S+ Printers: A strategic investment in ten new Prusa MK3S+ Printers has been made, enhancing the MakerSpace with devices that are both user-friendly and reliable for student use.

Academic Partnerships: Collaborative efforts have been established with departments such as Management, Elementary Education, and Art to diversify course offerings and extend learning opportunities beyond conventional STEM boundaries.

Summer UMass Boston Pathway Collaborations: MakerSpace has formed partnerships with Summer UMass Boston Pathway programs and various camps, including Urban Scholars, Project Reach, ADAGE, and NASA Pathways. These collaborations aim to integrate practical skills such as 3D printing, Robotics, Coding, and Prototyping into their educational programs.

Educational Technologies

Hosted the Annual Conference on Teaching, Learning & Technology (UCTLT 2024), themed "AI - The Good, The Bad, and the Unknown."

Conducted several TEACH Sessions addressing contemporary issues faced by faculty, including the use of AI in the classroom and social issues.

Organized New Faculty Orientation sessions for both Fall and Spring semesters.

Managed IT Governance by overseeing six working committees and reporting on their progress.

Convened the Academic Technology Committee (ATC) monthly, updating faculty on technological changes and gathering their feedback.

Implemented the Professional Development component of the ADAGE Grant (Addressing Digital Access Gaps in Education).

Research Computing

Chimera expansion - The local compute cluster chimera will be expanded (scheduled for June 2024) to include two additional CPU compute nodes, a GPU node, and a new login node to support a training grant. Six ancient nodes were retired as part of this process, to free space in the data center.

GPU server 'beacon' implementation - A standalone GPU server was implemented for two PIs in the computer science department. In addition, several standalone storage servers were implemented for various PIs across the university.

Backup system implementation - A new DDT backup system (server, disk, library) was implemented to meet backup requirements of some of the research servers that are excluded from enterprise backups. This replaces one of our older backup systems which is scheduled to be retired in FY25.

Virtual machine migration - several research computing virtual machines were migrated from an aging virtual environment to the enterprise disaster recovery VxRail system.

Unity adoption and migration - we continued to increase our adoption and use of the Unity cluster hosted at the MGHPCC, in terms of both the number of labs involved and number of researchers (faculty, staff and graduate students).

Classroom Technology and AV Services

Provided comprehensive video direction, AV support, video recording, live streaming, video editing, and YouTube file creation for UMass Boston's Spring 2024 Commencement Ceremonies. All events were held on campus, utilizing the UMass Boston Fiber network to live stream and provide closed circuit indoor viewing at multiple locations, with over 16,000 views to date.

Supported Chancellor Orozco's Inauguration Ceremony with video direction, AV support, video editing, and YouTube file creation.

Provided AV support, video direction, and video recording for 16 presentations in the University Hall Auditorium, including events for TEDx Boston and the Chancellor's Lecture series.

Delivered AV support, video production, and postproduction services for various internal and external events, such as the UMass Boston Fall Open House, Spring Welcome Day Ceremonies, and the Equity in Sports Leadership Event.

66 A belated but hearty thank you to John, Jeff, Mark, Mike, Lauren, Chris and Jack, for ALL of your work leading up to last week's TEDx Boston. I know that was a heavy lift and there were a lot of moving parts as well as adjustments that you needed to make/were asked to make but from my vantage point, the day went off flawlessly because of your professionalism and your teamwork. UMass Boston was on full display and so hosting a seamless and smooth program with all of the different parts that went into such an undertaking, reveals a lot about our University and the talent that is on our campus. And high praise indeed from TEDx Boston leader John Werner and from Paul English, who said that they wanted to host TEDx Boston on our campus next year! Cheers to you all for helping create such a fine day for TEDx Boston and for UMB!

-Adam K. Wise, Vice Chancellor, Advancement

Created videos for multiple departments and programs, including the Chancellor's Office, Office of Community Partnerships, and the McNair Program.

Managed AV installations, including an auto-switching camera and ceiling microphone system in the Chancellor's Conference Room and several lamp projectors in University Hall Classrooms.

Continued to issue Zoom licenses and support numerous Zoom webinars. Created and posted hundreds of slides to advertise events on the UMass Boston TV system displays across campus.

Provided technical support for over 290 campus spaces with AV technology, including the installation of additional cameras and microphones through the ADAGE Grant to enhance classroom capabilities.

Learning Design Services

Reworked the entire Instructional Design Program's syllabi. Worked with the program to identify a common syllabus design and made sure they were all accessible.

Put on a series of very successful Chat GPT panel discussions for faculty, providing guidance and expertise as well as getting the collaboration of faculty to share their work with Chat GPT.

•• Team, thanks for our partnership and your effort implementing Bb Support! It was a pleasure working with each of you.

-Travis Walden, Project Manager, Anthology

Our team set up and ran an LMS recommendation group using stakeholders from across the university to review and recommend the next LMS for the university. This included meetings, Presentations from the vendors and community input. A 15-page report was generated for the Provost. The recommendation for Canvas led to a pilot being stood up for the Spring of '24 which was very successful.

Our admin Kalindi Mehta has been instrumental in the support and set up of the pilot for Canvas. Without her dedication and knowledge, we would not have been able to successfully support the enrollment and creation of Canvas courses this Spring and Summer. In the background, Kalindi has also had to support the move from our 24/7 Pearson Help desk to the Anthology 24/7 help desk which includes many meeting to train the new help desk on our processes and KB articles.

We have also had to move to Base Nav in Anthology which is a theme change on the front end of Blackboard and the end to Building Blocks on the back end, so Kalindi has had to support the Vendors who have yet to implement their LTI changes successfully. For our team we have had to support the changes that faculty see and the access to vendors that no longer work.

⁶⁶ I just looked at the 601 course and it's gorgeous!!!! Thank you so much Linda for your fine attention to such detail and conformity with all the syllabi!!!!!! With much gratitude and appreciation,

-Carol Sharicz, Graduate Program Director, Instructional Design

We had two team members retire and one moved on to another position this year. We have hired a new employee, Melody Liu. And we are in the process of hiring two more to replace our retirees.

The Teaching and Learning Online Course developed by Rrezarta has been continuing to support the new online programs offered at the university. This year Rrezarta has had to rework the course in Canvas as the new programs will be expected to launch in Canvas going forward. This is our 1st of hopefully many badging programs that will be offered for professional development.

The Credential program with badging will be extended to all groups across the university. As this program grows more courses will be offered for free or at nominal costs to earn badges and upskill employees. Our first program planned in in the Wind Farm field by School for the environment and Zack Ronald is offering a badging course for students to learn to use the 3d printing Maker Space.

Migration to Canvas has begun in earnest as this Fall will be the largest group to teach in Canvas and by Spring of '25, we hope to have all courses running in Canvas. Blackboard will be sunset for us in July of '25.

IT Client Services

Launched the Tech Recycling Days program to address the surplus of nearly 10,000 computers, collecting 877 devices across three sessions. Successfully reclaimed 166 viable computers for redeployment, enhancing IT resource management and data security. The program will continue with periodic turn-ins and special pickup requests.

Stood up new Computer Request service for departments to request computers from IT following the university's new Computer Lifecycle Policy.

Created and populated a new Standing Inventory of computers to fulfill requests for computer equipment. This consists of a Repurposed Standing Inventory of previously used devices, and a Newly Purchased Standing Inventory of new devices. Created a monthly process to track inventory stock and usage rates.

Technology Services Adoption

Knowledge Base Improvement Project: Created a "Can't Log In" hub and streamlining the IT help content by moving several instructions to the Knowledge Base. Collaborated on project planning and strategy development to enhance content relevance, search functionality, and user-friendly navigation.

⁶⁶ Thank you Katherine so much for the One Drive/ Office 365 training today. I enjoyed it, and I learned a lot. My understanding of OneDrive has improved since taking your webinar. You gave a wonderful overview! At first, I didn't know how much I'd absorbed.

-Marilyn Day, Library Coordinator, Healey Library

Technology Training Offerings Advancement FY24: Expanded technology training offerings by scheduling 16 training webinars across nine topics and launching the 10th Annual "Tech Summer Camps." Developed self-paced WISER training website and integrated new Microsoft Forms and Planner training courses with job aids. Enhanced Microsoft Teams training to reflect the new interface and introduced a "What's New in Microsoft" Lunch and Learn series. Provided custom group training workshops, significantly improving professional development resources.

IT Website Improvement Project: Implemented major redesigns for the "Can't Log In" and "umb.edu/it/help" pages, integrating new CMS features such as the accordion module, visual router grid, and contact cards. Streamlined content updates, centralized IT contact information, and converted how-to PDFs into knowledge base articles. Coordinated with IT supervisors and staff to identify and resolve issues, enhancing overall website functionality and user experience.

Developed a new IT Outcomes website, enabling readers to access the IT Outcomes Magazine digitally. Emphasized preserving the magazine's graphic design-heavy nature to ensure a visually engaging online experience. Successfully migrated all past editions of IT Outcomes magazines to this new, user-friendly interface, enhancing accessibility and reader engagement.

IT Service Desk

Several staff members gained Azure certifications this year, including Azure 900 Fundamentals and Azure 104 Azure Administrator Associate.

Successfully tested and implemented the QLess system, launching the QLess walk-up feature at the Spring Orientation to streamline client sign-ins.

Collaborated with the Incident Management Steering Committee to document the Incident Management Process, which has now been formally adopted by Infor ⁶⁶ I wanted to share my sincere gratitude for the exceptional support provided by Rocky Haggard. Today, I faced a challenging situation where all the work I had dedicated two years to seemed to have disappeared in the CloudPC. This was frustrating to me. However, Rocky spent the entire his day helping me in recovering my files. I am truly grateful for his exceptional performance. He was really professional and responsive, looking for solutions. It made a significant difference in my situation.

–Jeein Jang, a second-year PhD student in Gerontology

Process, which has now been formally adopted by Information Technology Services.

Made significant progress on the IT Service Management Problem Management Process, enhancing our ability to address and resolve recurring IT issues efficiently.

Desktop Services

Received, imaged, and delivered 289 new computers ordered by various departments, including a mix of MacBooks, Dell laptops, iMacs, desktops, and iPads.

Processed approximately 401 surplus computers through the IT Workshop, ensuring proper handling and recycling.

Completed the panic button program removal project before the Spring semester, removing 75 devices from 15 departments on campus.

Made significant progress in enrolling devices in Intune, enhancing device management capabilities.

Encrypted computers with BitLocker during updates or upgrades to ensure data security.

Trained IT partners on how to enroll Windows devices into Azure Active Directory (AAD) and Intune.

Improved Intune by streamlining the enrollment process and securely storing BitLocker keys.

•• I had a laptop problem that required a hard drive replacement and a new operating system. Daniel and Hung were not only immediately responsive, but they carried out the work while helping me (a non-tech person) to understand what was happening and teaching me what I needed to do to fix the problem. I found that both had a generous and kind spirit throughout the process. I also want to acknowledge how lucky we are to have employees that go the extra mile for our IT needs! These are truly two of them.

–Rosanna F. DeMarco PhD, RN, FAAN, Associate Provost

Addressed frequent vulnerability-patching requests from the Security Team to maintain system integrity.

Facilitated IT Workshop and Desktop relocation, ensuring minimal disruption to services.

Upgraded client workstations to Windows 11, providing users with the latest operating system features and security enhancements.

Managed Services

Prepared and configured 18 new iMacs in the Digital Studio Lab for the English Department. Reimaged CCER Nursing computers and enrolled all computers in Intune. Worked on securing network jack access for four Physics labs, replacing HD with SSDs, and continuing the reimaging process. Additionally, setup and reimaged 24 microcomputers in the Biology lab, ensuring all devices were enrolled in Intune.

⁶⁶ Thanks so very much to Ananta for the quick service. This is great thanks again!

-Brian White, Associate Professor, Biology

Replaced Mac Lab C Macs with 24 Windows computers, enrolling all in Intune. Managed public use computers in Healey's 2nd, 4th, and 8th floors, ensuring Intune enrollment for all computer labs. Set up five monitor stations and two laptop docking stations in GRC and Healey's 4th floor. Additionally, setup 21 monitors, peripherals, and docking stations in FlexIT.

Configured a batch of Microsoft Surface Pro devices for the ABSN program, ensuring they were ready for orientation.

Enrolled new Wi-Fi-only iMacs to Ethernet by installing Ethernet adapters and activating jacks. Configured PaperCut for iMacs in the English Faculty Lounge.

Prepared, swapped out HDs, and delivered 25 donated laptops for U-Access students, enhancing their access to technology.

Developed a more efficient process for updating mobile carts across campus, streamlining operations and maintenance.

Set up a new microfilm device and computer for Healey Library. Worked on fixing tenable vulnerabilities, such as Log4j, for library computers.

Participated as one of fewer than 100 participants in a closed, worldwide beta test of Be My AI, utilizing OpenAI's ChatGPT 4's vision model. Provided valuable feedback on feature sets, output, and potential use cases in higher education. Continued active involvement in the ongoing developments of ChatGPT 4o and its revolutionary technology.

Applications Administration & Support

Our database administrators migrated the Enterprise SQL Server hosted in MS Azure back to on-premises in a virtual server environment on VxRail, including high-profile databases such as Campus Print Services, Beacon Card, and the Institutional Research Warehouse.

Procured, installed, and configured several newly licensed standalone SQL databases in the virtual server environment on VxRail, including those for the College of Nursing and Health and IT AV Services.

⁶⁶ I wanted to let you know that I had an IT issue that took 9 days to resolve and finally Tom McClennan was able to help. I was passed around so many times and he went the extra mile to help. I made him give me your email. He was outstanding.

-Carolyn Fernandez, Student

The Data Integration Team implemented the T2 Flex Parking application, developing integrations to support parking permit management and enforcement, enhancing efficiency and user experience.

Moved the Boomi Atom environment from its hosted operating environment in the Boomi cloud to the UITS cloud, in a major collaboration with UITS.

Assisted Emergency Management with resolving a long-standing issue with Alertus outdoor speakers and implementing Alertus Threat Watcher for Public Safety alerts, ensuring full operational capability.

Completed a campus-wide replacement of Alertus Panic Buttons with new Mitel devices, covering nearly 100 locations with assistance from Network Services, Emergency Management, and some vendor support.

The ServiceNow and Data Integration teams developed workflows and integrated BuyWays within the ServiceNow platform into the Asset Management module for the Computer Lifecycle Management (CLM) program. Planning and development for Phase II, including barcoding and integration with UITS Peoplesoft, are ongoing.

Placed Application Administrators for Enterprise Application Account issues during the start of semesters, providing justin-time incident resolution and expanding support staff involvement.

Introduced and tested the QLess product for student incident requests, later transitioning to the ServiceNow Walk-Up Experience for integrated tracking of activities within the Incident Management module.

Built and implemented Phase I of the Computer Lifecycle Management (CLM) workflow within ServiceNow, automating incoming BuyWays requisitions for IT hardware components. Phase II requirements have been collected, with ongoing work by the ServiceNow and Data Integration teams.

Information Security Office

Adopt a risk-based approach to information security: The ISO adopted a risk-based approach to information security, thoroughly classifying threats, vulnerabilities, and their potential consequences on the university. This paradigm shift aligned business processes with technology risk. The ISO targeted critical vulnerabilities identified by Tenable, leveraging the MITRE ATT&CK framework. The cyclical risk-based model

Student Employee Adam Sylvestre took care of me. He was great, very professional and helpful. He deserves a raise!

–Philip Carver, Director, Community and City Relations Community Relations

encompasses Asset Inventory, Vulnerability Management, Threat Risk and Prioritization, and Patch Management. Patch Management transitioned from KACE to Intune/Patch My PC for Windows and JAMF for Macs, handled by Desktop Services. Tenable was realigned into manageable units of Departments, Colleges, and specific Groups like the 'Save the Whales' campaign targeting VIPs."

Expand the Vulnerability Management Program: This project addressed vulnerabilities identified through FY 22-23 adversarial testing, DHS weekly scans, Tenable, and Defender. Critical vulnerabilities were patched first. An annual adversarial test with SecureWorks was conducted, and its findings will inform next year's Plan of Action and Milestones (POAM). ISO students revamped vulnerability scanning by grouping devices based on departments, improving vulnerability response from IT representatives. This effort will enhance ISO's vulnerability management going forward.

Conduct a comprehensive Cyber Awareness Program: The ISO modernized the Awareness Program, cultivating a security culture through creative community engagement. The "Secure Your Screen" theme during National Cybersecurity Awareness Month proved successful, involving staff, faculty, and students. Utilizing the InfoSec IQ platform, the ISO conducted numerous campaigns and phishing simulations.

The ISO staff participated in a tabletop Incident Response exercise, with student employees as the "red team" and ISO staff as the "blue team." The exercise, gaming-themed after "Dungeons and Dragons," incorporated an element of chance and chaos through dice rolls. Additionally, FERPA training for staff and faculty and mandatory yearly training for all employees, as required by State auditors and in partnership with Human Resources and the UMass President's Office, were implemented.

Achieve a Target State of Ransomware Readiness and Cyber Resilience: The 2024 tabletop exercise identified the need to enhance the ISO's readiness and response to ransomware events. Consequently, an automated ransomware response playbook was implemented to quarantine compromised devices rapidly, preventing communication with other nodes inside or outside the university network, except for the upstream Microsoft Defender servers. Additionally, an investigation package is collected for an analyst to download and analyze registry information, network connections, operating system service information, and other crucial data. A brief synopsis of the incident is emailed to the ISO staff, informing them of the device's isolated status and a link to download the investigation package.

Continue to deploy advanced cybersecurity solutions to gain comprehensive visibility into IT infrastructure. The ISO continuously expands its cybersecurity capabilities by deploying advanced solutions and monitoring tools. This approach

aims to gain comprehensive visibility into the university's IT infrastructure, enabling real-time threat detection and swift response to mitigate cyber risks. Our security arsenal includes next-generation firewalls, intrusion detection and prevention systems, and Microsoft Sentinel as the centralized SIEM platform. Various connectors have been integrated with Sentinel, including Microsoft Defender suite for Cloud, Identity, Endpoint, O365, Vulnerability. Management, and Cloud Apps, as well as the recently added Rubrik, an AI-powered cyber resilience platform for backup, data protection, and monitoring. This comprehensive setup facilitates real-time monitoring of network traffic, user activities, and system events, allowing for proactive threat and vulnerability identification before potential damage occurs. Notably, Rubrik enhances threat-hunting capabilities by performing Data Threat Analytics and continuous monitoring of backed-up data before committing it to storage.

Network Services

Implemented NG911 for accurate location information on all campus landline phones, ensuring compliance with State and Federal 911 requirements.

Replaced all campus network hardware, including wired switch infrastructure and Wi-Fi access points across all buildings.

Upgraded campus telecom carrier circuits to a more diverse solution, enhancing fault tolerance and robustness.

Supported commencement by activating the Emergency Operations Center (EOC) and providing mobile devices for the check-in process.

Designed and installed technology for various space renovations, including the new UMass Boston Veterans Center, IT Hotel space, new police station, new P&T offices, Nursing Virtual Reality Simulation Lab, and mailroom relocation.

Planned and created a comprehensive UMass Boston IT Disaster Recovery Plan.

Systems

Parking & Transportation Server Virtualization: The parking garages were previously run on three out of date hardware servers which have now been decommissioned following PCI audit requirements. The new severs are on VM's running the latest software. This allows for greater security and a simpler BCDR plan in case of failure.

SSPRT: Single Sign-on Password Reset Tool project was completed. Password Reset Modernization with the new Microsoft Single Sign-on Password Reset Tool (SSPR) uses the Microsoft Authenticator App for heightened security. Systems worked with Security and the PMO to ensure a smooth transition for all employees, students and departmental accounts. This implementation reduced and the number of calls to the IT Service Desk, enhanced user experience, increased security as well simplified auditing and tracking.

Research Computing Virtual Servers Relocation: This project relocates VMs from an old research VM OpenStack system to one of the newer VxRail systems, allowing the old hardware to be retired. There is no migration capability, so all servers must be rebuilt. This project is nearly complete.

Rubrik Backup and Cyber Resiliency Platform: Rubrik consists of 3 major parts: The on-prem 'Brik' where initial server backups are stores, the Rubrik Cloud Storage for extended storage of server backups, and the Azure Cloud Storage for critical mailbox and OneDrive backups, as well as backing up Entra ID accounts and Groups.

By implementing the M365 backup features of Rubrik, we have been able to restore files, protect our data, and have an ease of mind for auditing and security. This has also been extremely helpful for recovering files after a person has left and the account, with all its data, was deleted.

The Rubrik backup system scans for Ransomware (elevated encryption) as it backs up data, and so provides exceptional security. This system is now fully deployed. The recent upgrade to version 9.0.3 allows for additional security against the threat of user/admin compromise.

Systems is now creating dashboards to allow IT Partners to monitor their backups and perform their own file restores.

SolarWinds Monitoring System: Systems, Network and Security Teams are working together to stand up a new SolarWinds server for monitoring servers and network equipment. SolarWinds is already using ICMP to ping servers to alert admins in case of a failure, replacing the old ipMonitor system. Now we are working to add additional monitoring features, such as checking for extreme disk, CPU, memory usage and network traffic.

AD Sync Server Migration and Upgrade: As the first phase of the Active Directory Upgrade, Systems has created two new AD Sync servers, one as a Staging Server that behaves as a cold spare. The old server was in Azure, and the new ones are on-prem on the VxRail systems. The new location allowed us to relocate the Azure SQL servers, reducing operating costs significantly. The AD Sync server syncs accounts, devices and passwords from our local Active Directory to Azure AD, aka Entra ID, and is a mission-critical server.

VxRail System Upgrades: Both VxRail systems had software and firmware upgrades, from 7.0.400 to 7.0.452. This included a complicated change to a networking component called SmartFabric which allowed the hosts to communicate out via the network switches. These large-scale upgrades are needed as VxRail systems are a conglomerate of many components, and individual patching must be coordinated for optimal performance.

Inclusivity Project, Name Changes: There is an initiative to encourage inclusion by allowing the use of a "chosen" name. Enrollment has been allowing this for a few years, and now HR is working on establishing and refining the process, and Systems is assisting in making the requested name and email address updates.

Windows and Linux Server OS upgrades: Systems has upgraded all IT servers running OS levels approaching end of life, as updates and patches will no longer be available posing a security risk. Systems has also been assisting IT Partners with their upgrades, and only a very few remain.

IT Business Office

Collaborated with Client Services and the IT Project Management departments on the UMass Boston IT Computer Exception program, ensuring that unique computing needs were identified and met efficiently.

Assisted ITS staff with professional development by managing their registration processes and facilitating timely expense reimbursements for various professional development activities.

Supported contract negotiations for the renewal of software and hardware maintenance contracts, ensuring that the university maintained essential services without interruptions.

Renewed or procured new software licenses that support all UMass Boston teaching, learning, and research activities, contributing to an enhanced educational environment.

Facilitated the hiring and payroll processes for student employees, ensuring timely onboarding and accurate compensation

Project Portfolio

FY24 IT Project Portfolio

June 2024	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec	Jan 2024	Feb 2024	In Que Mar 2024	Apr	May 2024	Comple Jun 2024	Jul
AV Upgrade Program													
Blackboard Base Navigation Upgrade													
Canvas LMS													
Cloud Strategy 2.0													
Community & Executive Education							÷						
Computer Lifecycle Management													
Disaster Recovery Planning													
Document Imaging													
Enable Inclusive Identity HR													
Helio Campus													
Improving IT Service Delivery													
Information Security Improvements FY24													
IT Asset Management Intake													
IT Start of Classes Fall 2023													
IT Start of Classes Spring 2024													
Network Core/Edge Upgrade												4	
Network Wireless Upgrade													
NG911													
Parking & Transportation - T2 Flex													
Public Safety Communications													
Qualtrics Replacement													
Slate Student Success (SSS)													
Transact Campus (eCommerce)													
Transition LMS Support to Anthology													
Windows 11- Planning and Pilot													
Information Technology Proje	ect Ma	anag	eme	ent (Offic	e				UI Bo	Mass oston	B)
Bayside Building, 5th floor • pmo@umb.edu	• 617.28	7.5274											
https://umb.edu/it/pmo													

AV Upgrade Program

Timeline: Jul 3, 2023 - Jun 28, 2024 Status: Complete! Project Owner: Apurva Mehta

This is a yearly program that manages a number of AV sub projects each cycle. Maintaining our classroom and lab with the latest technologies are critical for our students, faculty and staff. The FY 24 project will target multiple TEC, classrooms and labs to be upgraded.

Blackboard Base Navigation

Upgrade

Timeline: Sep 1, 2023 - May 31, 2024 Status: Complete! Project Owner: Terry Phalen

Upgrade Blackboard 9 to Blackboard Ultra Base Navigation by August 2024 per Anthology requirement.

Canvas LMS

Timeline: Aug 1, 2023 - Jul 31, 2025 Status: On Schedule Project Owner: Apurva Mehta

Canvas LMS platform configuration, Canvas Mobile Application configuration, Data integrations- Peoplesoft and Canvas LMS., Migration of Blackboard course content. Decommissioning of Blackboard LMS system, Creation of Marketing/ Communication Plan. Creation of Administrative, Service Transition & Training Plan.

Cloud Strategy 2.0

Timeline: Jul 1, 2022 - Jan 4, 2024 Status: Complete! Project Owner: Ray Lefebvre

The Cloud Strategy 2.0 project focuses on the development of a training program and a series of assessments designed to create a support team charged to design, develop and support all components of the new UMB IT Hybrid Cloud environment.

Community & Executive Education

Timeline: Apr 1, 2024 - Jan 31, 2025 Status: On Schedule Project Owner: Apurva Mehta

Project to stand up Community & Executive Education business/function within Academic Affairs to include a Course Catalog, Registration, Credentialing, Payment, and Marketing/Communications leveraging the new Canvas LMS platform as requested by Provost, Joe Berger and Associate Vice Provost, Tina Chang.

Computer Lifecycle Management

Timeline: Aug 1, 2023 - Jun 30, 2025 Status: On Schedule Project Owner: John Mazzarella

Design, develop, and implement Computer Lifecycle Management business & technical processes including a continuous improvement loop.

Disaster Recovery Planning

Timeline: Jul 1, 2023 - Jun 30, 2024 Status: Complete! Project Owner: Ray Lefebvre

Formal project to continuously improve UMass Boston IT disaster recovery preparedness in alignment with institutional and system-wide business continuity/disaster recovery preparedness planning.

Document Imaging

Timeline: Dec 1, 2022 - Jun 30, 2025 Status: On Schedule Project Owner: Linda Modiste

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. SoftDocs has been chosen as the new document imaging platform via an RFP process completed by UPST and UITS. UITS is leading the system-wide project.

Enable Inclusive Identity HR

Timeline: Oct 1, 2022 - Jun 30, 2025 Status: On Schedule Project Owner: Linda Modiste

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, Staff and Student Employees 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 Phase 1 - changing "Gender" label to "Sex", adding a value = X required for external reporting, and adding "Pronouns". Phase 2 - updating Preferred Name to "Chosen" Name and building systems integration between WISER SIS and HR's Human Capital Management (HCM) application to provide consistence across campus applications 3. expand integrations of Inclusive Identity values to targeted downstream applications where appropriate and feasible. It is very important for the

purpose of continuity of experience that we are consistent with these value across all major platforms accessed by our staff and faculty. Potential Phase 4 would include design and development for adding Sexual Orientation and Gender Identity that are currently available in SIS. These terms require additional consideration by leadership before including in the scope given their sensitivity.

Helio Campus

Timeline: Sep 1, 2022 - Dec 31, 2023 Status: Complete! Project Owner: Terry Phalen

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.

Improving IT Service Delivery

Timeline: Jul 1, 2023 - Jun 30, 2024 Status: Complete! Project Owner: Terry Phalen

This is a multi-year project to improve IT Service Delivery through implementation of formal IT service management principles & practices starting with Incident Management, followed by Request and Problem Management.

Information Security

Improvements FY24 Timeline: Jul 3, 2023 - Jun 28, 2024

Status: Complete! Project Owner: Wil Khouri

A full year project designed to implement University security improvement initiatives to ensure our University security profile, guided and assessed by an annual audit and a pen test - scope includes Azure SSO, IPAM, MFA, SIEM, …

IT Asset Management Intake

Timeline: Jul 1, 2022 - Aug 30, 2023 Status: Complete! Project Owner: John Mazzarella

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. To support this initiative a project team has been charged to design and implement a new business process that will provide IT with the tools and data need to properly manage all IT assets.

IT Start of Classes Fall 2023

Timeline: Jul 1, 2023 - Sep 15, 2023 Status: Complete! Project Owner:

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 implementation of the "start of classes" task activites for the Fall 2023 term.

IT Start of Classes Spring 2024

Timeline: Nov 1, 2023 - Feb 1, 2024 Status: Complete! Project Owner: Linda Modiste

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 implementation of the "start of classes" task activities for the Spring 2024 term.

Network Core/Edge Upgrade

Timeline: Jul 1, 2022 - Jun 28, 2024 Status: Complete! Project Owner: Jamie Soule

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 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.

Network Wireless Upgrade

Timeline: Nov 1, 2022 - Jun 28, 2024 Status: Complete! Project Owner: Jamie Soule

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 purpose of the project is to upgrade current equipment to provide a reliable consistent experience when connecting via a mobile device.

NG911

Timeline: Jan 1, 2023 - Aug 30, 2023 Status: Complete! Project Owner: Jamie Soule

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 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.

Parking & Transportation - T2 Flex

Timeline: Sep 2, 2023 - Feb 1, 2024 Status: Complete! Project Owner: Terry Phalen

The project team is charged with the implementation of the T2Flex management software, a hosted solution that will provide a Permit Management and Enforcement (PE) capability for the UMB Parking and Transportation department. Flex will introduce a new process for managing permits (currently referred to as parking passes) efficiently and enforcing parking effectively via a real-time view of parking activity and management. The application also provides access to reports and analytics to assess our business status.

Public Safety Communications

Timeline: Jul 1, 2022 - Sep 1, 2023 Status: Complete! Project Owner: Terry Phalen

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 to procure the necessary equipment and lead the implementation to install and operationalize the communications equipment.

Qualtrics Replacement

Timeline: Apr 1, 2024 - Dec 31, 2024 Status: On Schedule Project Owner: Ray Lefebvre

Replace Qualtrics with newly selected platform as drive by UITS.

Slate Student Success (SSS)

Timeline: Mar 25, 2024 - Jun 30, 2025 Status: On Schedule Project Owner: Mary Ryan Enrollment Management to implement SSS instance for UGRD and GRAD. Data needs from PeopleSoft include Student BioDemo data, course enrollments, etc. Expect that data will need to be imported from different sources and modes (Summit files, PS API or files, etc.). Contract just approved on 3/25; first meeting with vendor HCRC scheduled for 4/4/2024. Have begun researching SSS and development of some initial rudimentary Summit reports.

Transact Campus (eCommerce)

Timeline: Apr 1, 2024 - Dec 31, 2024 Status: On Schedule Project Owner: Linda Modiste

New A&F project eCommerce implementation: A&F Treasury department is leading a process to implement a new webbased, hosted, PCI compliant solution to accept credit cards as payment for goods and services. The new system is called Transact eCommerce; it will replace Cyber Source. This will enable departments to develop storefronts to transact university business, and the solution will connect directly to general ledger accounts. Implementation is estimated to begin in May and run through August.

Transition LMS Support to Anthology

Timeline: Aug 30, 2023 - Jan 17, 2024 Status: Complete! Project Owner: Terry Phalen

24\7 support for our Learning Management System is critical for our 24\7 learning community. Embanet, our current support vendor will no longer offer this service as of December 31, 2023. To maintain the continuity of experience for our community the campus will replace Embanet with Anthology, a new 24\7 LMS support vendor.

Windows 11- Planning and Pilot

Timeline: Jul 1, 2023 - Jun 30, 2024 Status: Complete! Project Owner: John Mazzarella

Microsoft as announced the end of life cycle for the windows 10 operating systems. The project team will upgrade machines where applicable and develop a new 'computer replace' inventory to be implemented over the next two years. Prep work for the eventual need to have no Windows 10 computers left on campus by Windows 10 End Of Life, Oct. 2025. Test UMB services compatibility with Windows 11, take throughout inventory of incompatible existing fleet.