



The University of Vermont

Annual Update on Information Technology at the University of Vermont

November 1, 2022

Prepared By

T. Simeon Ananou, Chief Information Officer

University of Vermont
Information Technology Strategic Plan
Framing the 2020 Vision for the Use of Information Technology to Advance the Mission of UVM
Report 2021- 2022 Cycle

Executive Summary

This report features UVM’s progress on the use of Information Technology to advance the institution’s overall mission. As such, the highlighted accomplishments celebrate our technological successes, our dedication to the success of the University, and the varied talents within our vibrant IT community. As a service organization, we continue to partner with our campus colleagues across the institution to improve services and better meet the needs of our community. Major highlights of our partnerships include reviewing, evaluating, selecting, and implementing a new Learning Management System, the expansion of the University computer network to key areas across the state in support our land grant mission, the Lived Identity Project, significant improvements to research computing support, expansion of research computing capability in compute and storage services, and the ongoing migration to a new facilities management system – just to name a few. We have also made progress in our efforts to consolidate, improve and create efficiencies in our IT Shared Services efforts.

While we still have more to accomplish, we are proud of our staff and our community that helped us bring about such significant change. We are committed to these efforts and will continue to make improvements for the future. And to ensure that we can continue important work across campus, we took a strong look at our own unit. This led to some key changes that set us up for ongoing success in supporting the missions of the institution. For instance, the recent restructuring of our Systems Architecture & Administration (SAA) unit has resulted in the creation of four team lead positions within that department. Additionally, our DEI Working Group has remained very active, and is completing a plan to help expand our hiring practices and retention in ways that would encourage more diversity in our unit, especially as we work to fill vacancies. The successes described throughout this document are, as always, a direct reflection of the University’s highly talented and dedicated Information Technology professionals and you, our community, who partner with us on a regular basis to make continuous improvements across the University.

We have had much success this past year, yet we always strive to do better. Over these coming years, we see opportunities to partner with campus stakeholders to address many issues including: a revision of our IT Governance, an expansion of our research computing support, improvements to our research data protection protocols, cyclical replacement of classroom technologies, making progress on our ERP Modernization efforts, a revision of our institutional computing device management procedures, a review of our network and telecommunication funding model, information security enhancements, improvements to collaboration technologies such as Exchange Online and OneDrive migration and the replacement of our network infrastructure in parts of the campus. We will also continue to improve our IT Shared Services model, with a strong commitment to the ongoing restructuring of the various units within ETS. It is evident there are many challenges ahead, but we hope to overcome them with assistance of the campus community by participating, collaborating, and listening on both sides.

Summary of Some Major ETS Accomplishments

- Partnered with the Office of the Provost and successfully completed the most comprehensive review of the Learning Management System (LMS) in 10 years, including a successful RFP that led into UVM's transition from Blackboard to Brightspace. Implementation is well underway with a pilot running for small number of Spring 2023 courses prior to full cutover for Fall 2023.
- Partnered with College of Agriculture & Live Sciences/Extension, and successfully completed the installation of a new computer network at 10 out 11 extension sites to fully integrate them in the UVM domain.
- Successfully established a DEI working group within UVM's vibrant IT community to:
 - Increase awareness of the importance of DEI in IT overall;
 - Increase the number of under-represented/marginalized populations within ETS;
 - Use technology to remove barriers;
- Completed UVM's first large-scale IT disaster recovery exercise. Thoroughly tested data protection and DR tools for many core IT services, moved services to secondary datacenter, documented process and findings.
- Successfully built Lived Identity system and updated major university technology systems to accommodate lived names and pronouns.
- Partnered with the Office of the Vice President for Research, and successfully refreshed and upgraded Bluemoon, UVM's original High Performance Computing Cluster, doubling compute cores and storage.
- Partnered with the research community to establish a new research computing support framework that leverages shared institutional research computing resources. Built new website specifically for research computing services.
- Deployed new cluster to support virtual machines (VMs) for researchers with the option for GPU-based compute and machine learning development. (includes a free tier of compute)
- Upgraded the research storage environment to provide 5TB of free storage to every UVM researcher. Additional storage can be provided beyond that 5TB as needed.
- Deployed Globus for research data transfers and sharing.
- Awarded NSF grant to build new large-memory database cluster. Completed RFP and purchase of cluster with 64TB of RAM to run sharded MongoDB for large-scale data analysis. (DataMountain)
- Partnered with the academic deans, and successfully transitioned all academic units to a centralized institutional IT issue tracking system.
- Replaced 362 wireless Access Points in 51 buildings
- Expanded our information security awareness efforts
- Embarked on the implementation of Mulesoft, a data integration platform (iPaaS) to improve data orchestration and automation between mission critical systems.
- Partnered with the Vice President for Business and Finance to embark on the migration to a new facilities management (Integrated Workorder Management System, IWMS) platform. This transition from FAMIS to Planon is well underway with go-live slated for early in 2023.

- Successfully deployed Salesforce's Service Cloud to Extension, Residential Life and OVPR, with deployment nearing completion for SFS. Service Cloud is being used in these areas for case and constituent management plus is being stood up as the institution's core Customer Relationship Management (CRM) platform.
- Partnered with the Registrar's Office on the course renumbering project to expanded course numbers from 3 to 4 digits to enhance academic departments' ability to develop their curriculum and support new collaborations
- Partnered with the Registrar's Office to upgrade and modernize DegreeWorks, the planning tool that helps students and advisors monitor student's progress toward degree completion.
- Successfully replaced 120 PCs in General-Purpose classrooms
- Maintain a highly functional Client Services operations that is responsive to the needs of the UVM community
- Deployed and leveraged CRM technologies to manage pandemic compliance messaging, aided in technical development of multiple new newsletters, & enhanced population definitions for sends to more closely match HR guidelines. Acted as primary trainer and sometimes sender for community wide sends.
- Partnered with the UVM IT Governance Groups to embark on the most comprehensive review of the major systems that support HR and finance functions and student registration. The last review of the magnitude was conducted more than 25 years ago and has resulted in the initiation of a project to write an RFI in the ERP Modernization space. We will be partnering with an external Project/Change Manager to guide us expertly through this massive exercise.
- Partnered closely with HR, Finance and other campus partners to extend PeopleSoft functionality including electronic Open Enrollment, automation of subaward invoice processing, work on the replacement of the check request process, rollout of the Company Directory in HCM and the upcoming rollout of Telework Request functionality. Also all work needed related to the new union contract.
- Further improved endpoint management systems.
 - Enhanced virtual desktop infrastructure (VDI) with more GPU capacity, expanding use of ArcGIS and other high end software tools for students and faculty.
 - Extended VDI to support students whose laptops didn't arrive on-time during the fall of 2021. Grossman computer lab successfully migrated to VDI right before start of Fall 2021 semester.
 - Complete overhaul and implementation of new macOS computer lab management framework.
 - Modernized lab/classroom endpoint management for increased usability, flexibility, and security.
 - Expanded use of application virtualization
- Started significant migration of data from file servers to OneDrive.
- Reached Exchange Online project milestone that let us migrate initial early adopters to Exchange Online.

- Shibboleth Identity Provider major upgrade, enabling integration with more services and enhanced Duo capabilities.
- Ongoing collaboration with Microsoft to address accessibility concerns in Teams and other products.
- Deployment of Teams room systems to support hybrid meetings and events.