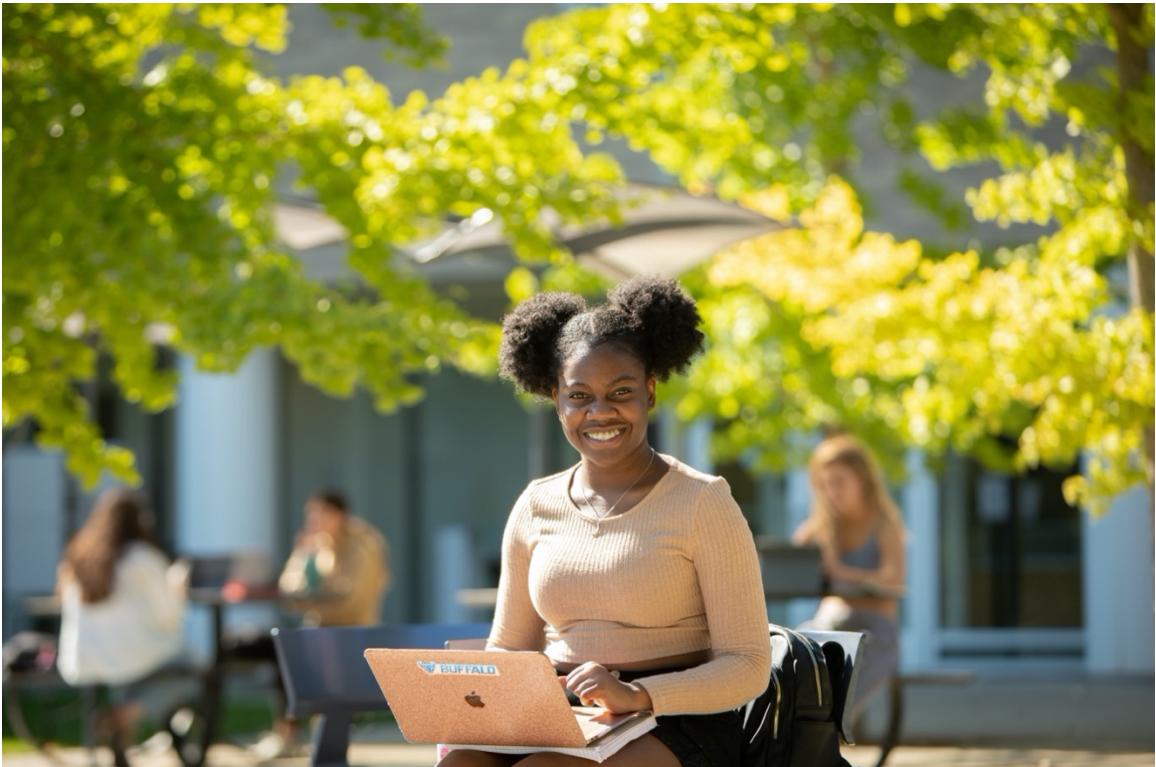


2022 UBIT Year-End Report & Evaluation



Spring 2022

Office of the Vice President and Chief Information Technology
UB Information Technology

2022 UB Information Technology (UBIT)

Year-End Report

Overview

The University at Buffalo Information Technology (UBIT) division under the Vice President and Chief Information Officer (VPCIO) had an excellent year of performance in support of the faculty, students, and administration at UB. Whereas the 2020-21 fiscal year was focused largely on remote education, 2021-22 marked the return to “near normal” operations on campus after the pandemic, allowing the VPCIO team to “restart the IT engine” and focus efforts once more on delivering on-premise IT services to our constituents.

As described in this report, this restart had its challenges: recruiting/retention of staff (during the Great Resignation) and major supply chain issues, to name a few. However, thanks to the tireless dedication of the VPCIO staff and excellent partnerships with our academic and administrative unit colleagues, 2021-22 was a productive and successful year. The moves we’re making today ensure that UB will benefit from reliable, modern IT infrastructure and services for years to come.

The VPCIO personally focused on regrouping and reenergizing the IT staff, building collaborations with campus leaders, reestablishing state and national university connections, and supporting the overall university vision for the future. The three themes of *Student Success*, *Diversity and Inclusion*, and *Resource Management* were (and are) woven into the fabric of our organization. We recognize the value and responsibility of equitable treatment for all as well as the diligent focus on student success and effective resource administration. We strive to honor these values, while targeting the best and most innovative usages of emerging technologies.

This report summarizes these efforts and describes the strategic direction the VPCIO area will take in the coming year to help UB reach the Top 25 and beyond.

All topics in this report will correspond to at least one of the three major themes of *Student Success*, *Diversity and Inclusion*, and *Resource Management*. The following icons will accompany each topic as a reference.

-  *Student Success*
-  *Diversity and Inclusion*
-  *Resource Management*

Accomplishments

Classroom technology and enhancements

Natural Sciences Complex (NSC) classrooms

Technology upgrades in NSC 201 and 225 were completed in August 2021. The redesign showcases the latest display technology: 30 ft., direct-view LED walls, capable of more than one content source.

The video walls enable hybrid learning by bringing remote students into the room. Microphones in the classroom rows allow in-person students to be heard by those who are virtual. By opening the old projection booths to the hallway, students and prospective students can see the large display walls as they pass by.

According to a post-occupancy survey conducted by the Office of Curriculum, Assessment and Teaching Transformation, both faculty and students found the space renovations favorable. Faculty had glowing things to report in interviews, stating the space was “excellent” and “extraordinary.” The faculty enjoy lecturing in the space, compared to other, non-renovated spaces on campus, and the students found the renovations generally satisfactory.

To support the cutting-edge technology in NSC classrooms, UBIT’s classroom systems technicians created a new telecom room, utilizing two new-to-UB technologies: Audio/Video Bridging (AVB) for classroom microphones, and a NVX video distribution solution to maximizing the capabilities of the new video walls.

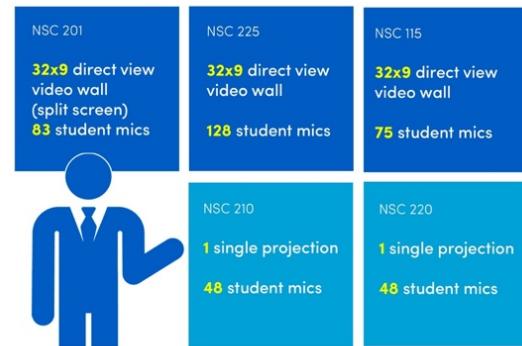
Plans continue to enhance UB classrooms with state-of-the-art audio/video services. By fall of 2022, UBIT plans to have enhanced 134 classrooms in this way, with 101 rooms designed for automated lecture capture with Panopto.

Public computing sites for students

In Spring 2022, 4,944 unique accounts logged into public workstations across UB’s computing sites, the majority of which were undergraduate students (70%).

Research by UBIT’s Communication and Engagement division identified that, although UB students continue to use open computers in computing sites for coursework (despite the proliferation of personal devices on campus), they are also eager for more flexible spaces that accommodate different ways of working/studying.

Based on feedback from a survey of 360 UB students, UBIT launched a pilot to provide “BYOD” device stations in computing sites during Summer 2022 where students can connect their personal laptops to ultrawide monitors with additional multitasking features.



LevelUp features 60 iMacs/PCs for student use

Student demand for more flexible computing spaces informs and is aligned with UBIT's evolving vision for UB computing sites, which sees a pivot from traditional desktop computing to more interactive and emerging technologies like AR/VR.

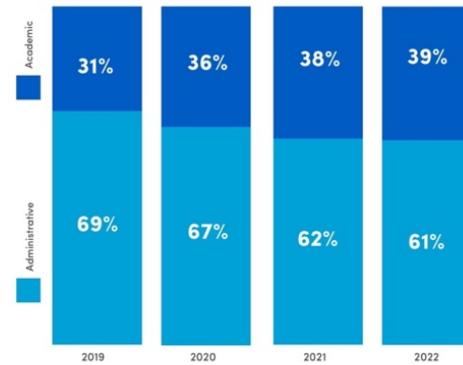
UBIT Help Center support tickets

During the 21-22 academic year, UBIT's Customer Service department and Help Center received 15,265 requests for help with technology from the UB community. The top three categories for tickets were:

- Accounts (UBITName activations and password resets)
- Applications and software (installing and configuring enterprise applications like Zoom)
- Email and calendaring

39% of all tickets submitted to IT Customer Service in 21-22 were academic in nature which is up from 31% just four years ago as shown in the chart below.

As technology innovations continue to shift from locally managed devices and end-user digital tools to centrally managed administrative tools and cloud-based services, our customer service model is adapting too. We continue to advocate for our distributed IT staff, those embedded in UB departments, to focus on local faculty and staff academic technology needs while taking full advantage of the robust and modern IT tools and infrastructure provided by the central VPCIO unit. It is also important to note that UBIT is the only IT support area that provides direct help to UB students with technology questions and issues.



IT support tickets (Admin vs. Academic)

Student laptop loaner program

Launched in response to the COVID-19 pandemic, UBIT continues to partner with UB Libraries each semester to make available 450 laptops (current count) for loan to students. “I owe my grade to this laptop,” one student told UBIT who borrowed a laptop after theirs stopped working during the second week of classes. “I have used it every single day since I got it.”

LevelUp computing site, gaming lounge and Esports arena

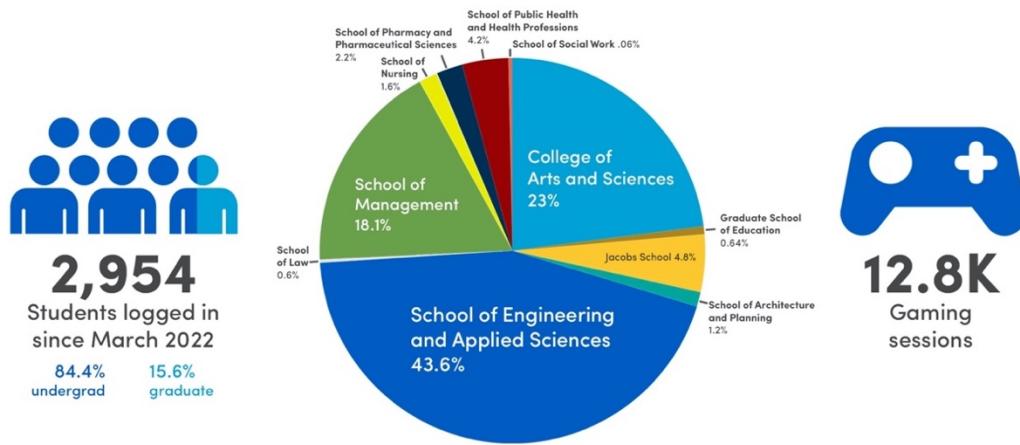


LevelUp state-of-the-art Esports arena

In March 2022, construction was completed on an ambitious renovation of the UBIT Cybrary computing site in the Lockwood Library building, turning it into a state-of-the-art space for both work and play.

The new LevelUp site offers a 52-seat Esports arena with top-of-the-line Alienware gaming machines, where students can play 36 preloaded games. LevelUp also features a console gaming lounge, where, in the first three months of operations during Spring 2022, UB students reserved gaming pods with large screens and the latest gaming consoles (Nintendo Switch, Xbox Series X and PlayStation 5) 1,704 times.

While the space offers students an informal setting for work, play and community building, the technology that makes it possible requires leading-edge advanced networking and video streaming capabilities that are also utilized elsewhere on UB's campus, including in the newly renovated Natural Sciences Complex.



LevelUp adoption Spring 2022

Wi-Fi upgrades and expanded outdoor spaces

In 2022, UBIT began the largest update of Wi-Fi technology on campus since 2016, upgrading access points to the newest Wi-Fi 6 standard (802.11ax) and expanding the number of HP/Aruba access points in academic buildings and residence halls. By the expected completion of the project in 2024, UBIT network technicians will install 4,000 campus access points (500 more than today) and 6,500 access points in residence halls and on-campus apartments (a greater than twofold increase, giving each room its own access point for the first time).

The new Wi-Fi 6 standard promises better performance in crowded areas and an increase in maximum potential speeds of approximately 40%. We anticipate this will greatly enhance the real-time classroom instruction across the Institution.

With an even more robust and flexible wireless network, UBIT network engineers are exploring ways to add value by bringing network connectivity to new areas of campus, from bringing Wi-Fi to UB buses to connecting UB's new outdoor drone testing facility.

UB phones (VoIP)

UB's VoIP-based telephone solutions are becoming safer and more reliable. In 2022, the 9Line tool was purchased to provide E911 location reporting for softphones and the campus was transitioned to 10-digit dialing to accommodate a new nationwide crisis and mental health line. UB's remaining analog telephones (112 in total) were also migrated to digital in 2022.

Fiber riser conversion project

UBIT is upgrading cabled links between telecom rooms in every UB building, replacing legacy copper cable infrastructure with fiber optic cabling. Upon completion, this project will upgrade 109 sites in total. To date, the project has been implemented at 82% of the initial estimated cost per unit.

Ivy Chatbot

Virtual Vic, UB's online AI virtual assistant, made its debut on campus during the Spring 2021 among a small pilot group consisting of UBIT, Student Accounts, and the Career Design Center, and has expanded its presence since then. During 2021-22, four departments also followed suit with Virtual Vic launches of their own, including the Office of the Registrar, Parking and Transportation, Business Travel, and the Graduate School of Education. Other customer-facing departments have expressed interest in the platform. Almost 20,000 messages have collectively been sent to Virtual Vic to date, according to vendor Ivy.ai.



Virtual Vic uses an AI algorithm to build its brain, in order to answer common questions. Students get the answers they need about paying their bills or career advice instantly, 24/7, resulting in an improved student experience.

Project OVERCOME

Project OVERCOME was a 2021 National Science Foundation and Schmidt Futures sponsored initiative to trial the application of cutting-edge wireless technology (CBRS) to provide broadband internet service to



the underserved Fruit Belt community. The VPCIO area provided project management support and operational guidance on the project, working with EE and GSE faculty PIs and members of Mission Ignite, the Oishei Foundation and Community Tech NY (CTNY). The Fruit Belt community is disproportionately affected by the digital divide, with 30% of households lacking broadband internet (10% higher than greater Buffalo) and 26% lacking a computer of any kind (12% higher than greater Buffalo).

Buffalo's historic Fruit Belt community

Initial plans targeted approximately 140 homes to receive free broadband Internet. Due to the impacts of COVID and other factors, 36 were completed within the original, short project timeline. Physical and organizational infrastructure was left in place that will allow for continued service to those homes and growth to additional homes. As of May 2022, 39 homes have had Internet installed.

Chosen name

UB's online directory was upgraded this academic year and now displays faculty, staff, and students' chosen name.

Pronouns and gender identity in HUB

Partnering with the Registrar and Office of Equity, Diversity and Inclusion, UBIT made changes to the HUB Student Information System to support student pronouns and gender identity. Students can add pronouns and update their gender identity within HUB. If students had entered pronouns or gender identity information on their admissions application, that information is now brought over automatically to the HUB Student Information System. Administrative staff now see pronouns displayed within HUB in parenthesis next to a student's names. Student pronouns will be added to all class rosters during Summer 2022.

Diverse communication with international education

UBIT's Communication and Engagement division works closely with International Education to tailor messages for UB's international student population. From orientation sessions specifically for international students to regular features in International Student Services' student newsletter, UBIT provides critical information on how to purchase hardware, download software and avoid job and visa scams that disproportionately target international students.

Accessibility reviews of technology

At its best, technology makes learning and information more open and accessible. As a public institution, it is imperative that our resources are accessible, and our tools for accessing them serve that critical purpose. To that end, UBIT regularly reviews all technology tools to ensure they are accessible to the entire UB community. Our staff also review our website documentation, including videos and reports, to ensure that information was accessible to screen readers and other accessibility tools used at UB.

Migrating to Microsoft 365

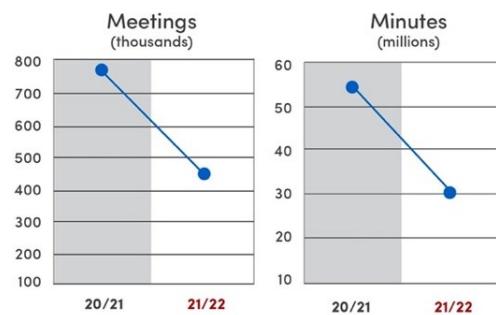
In 2021-22, UBIT migrated 18,000 email accounts from on-premises Exchange to Exchange Online, part of Microsoft 365. UBIT also migrated all SharePoint sites from on-premises SharePoint Online. This migration has both modernized the email services available to faculty, staff, and students as well as begun the alignment of collaboration tools for both faculty and students.

Panopto and Zoom

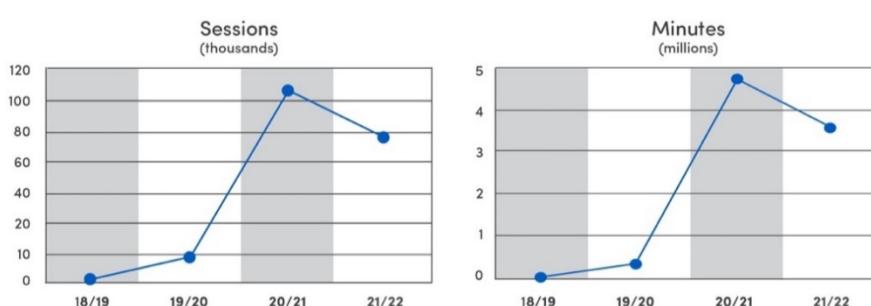
In 2021-22, although the university had largely returned to on-campus classes and activities, use of collaboration tools like Zoom and Panopto continued to be strong. Usage peaked during the pandemic, but remains quite active.

In 2019, UB hosted approximately 17,000 Webex meetings, far less than the nearly 450,000 Zoom sessions experienced during 2021/22 academic year.

Panopto has been widely adopted at UB, and faculty continue to find value in lecture recording even after the return to mostly in-person learning. 78,906 Panopto recordings were created during the 2021-22 academic year; nearly 100% of Panopto recordings are for academic instruction.



Zoom usage 2020 to present



Panopto usage 2018 to present

Enhanced IT security



The UBIT Information Security Office (ISO) takes a risk-based approach to implementing and improving UB's cybersecurity program. While focus is commonly given to security through technology, we continue to take a holistic approach to our cybersecurity program that includes considerations for data risk, privacy, workflow and process improvement, third party management, workforce safety and technical security safeguards.

Increased visibility into campus technology

Central and distributed IT partners have worked hard to bring many services and servers into Splunk, our log reporting, aggregation, and alerting system. To date, we have/are:

- Onboarded and are currently ingesting a total of 693 servers (538 central servers, 155 distributed IT servers) from across the university
- Collecting logs from on-campus networking, authentication, and web hosting services
- Collecting logs from key third party providers like Duo and Box
- Using telemetry from services like Duo to detect compromised or misused accounts

UBIT has also implemented a service to deploy various “canary” hardware, software, and firmware sensors to better detect signs of intrusion or nefarious activity on our networks.

Redefining our network “perimeter”

As the tendency and expectation towards remote forms of work and computing evolve, UBIT has implemented the following network security enhancements:

- Enablement of “Default Deny-all” edge firewall protections at our network boundary
- Implementation of a new “Exceptions” segmented network for one-off security allowances based on research and pedagogical needs
- Expand use of tools like [ShadowServer](#) and [CISA’s Cyber Hygiene](#) services to gain an external vantage point of the university’s vulnerable attack surface

Process improvements

Often, “soft” controls like business process improvement, standards development, governance, risk and compliance tend to not get the same attention as technical controls. However, these elements are just as important to a cyber security program.

- UBIT has updated the process used to make assessments and statements on third party, IT vendor risk to the university. We have worked with partners in procurement and EDI to ensure that our process coalesce with one another to form a streamlined experience for university constituents
- Approval process for reviewing, vetting, and approving third party apps that integrate with Zoom and MS365
- Improved standards for securing category 1 data, server hardening and code/application development

Preparing for the worst

For most organizations, the question of a Ransomware attack is “when, not if.” To this end, we have strengthened our incident response (IR) efforts by:

- Setting up a retainer agreement and conducted a IR preparedness engagement with a third-party IR firm, Mandiant

- Updated and operationalized IR plans with specific thresholds for escalation and levels or response
- Organizing a second summer tabletop exercise to include elements of a ransomware attack with kinetic impact on building systems. This event will include representatives' areas of the University, including Facilities, Communications, Legal, Audit, and IT

Securing Start-up New York

UBIT has partnered with Spectrum Communications on a plan to migrate non-UB entities, including those related to START-UP NY, from the university's network to multiple solutions provided by Spectrum, largely for security reasons.

COVID-19 response

In continuing to respond to the COVID-19 pandemic, new services like LifeLink and PocketCare were implemented, along with numerous changes to HUB. UBIT also helped implement COVID test and vaccine data upload systems at UB and in conjunction with the State of NY/SUNY.

Improvements in HUB Student Center

Improved processing of Excelsior Scholarships

UBIT provided a much more flexible, manageable system to evaluate and certify awards to Excelsior recipients while greatly reducing the man-hours necessary to provide this service.

SUNY Degree Requirements for Advising

UBIT incorporated new SUNY Gen Ed requirements to the Pathfinder application that helps with Advising.

Point n Click

Live as of June 2022, Point n Click is a replacement of antiquated Student Health Records system with a modern EMR in partnership with Student Health Services.

PI 25 PeopleTools version upgrades

HUB is updated with legislative updates as well as feature enhancements. These major updates were applied four times this year.

Integration of campus data with third-party systems

A number of projects and software in 2022 required access to student/employee data feeds, including:

- Point n Click
- MailChimp
- License Place Recognition
- Student Life data sharing project
- Campus Parking Service Indicator
- Axiom Financial Commitment Management
- Kronos Time and Attendance (Campus Living)

UB Infosource Data Source Additions

Added new data areas to UB Infosource for campus and SIRI reporting needs. The new areas include: Research Proposal/Award and Expenditure, New Student Orientation, Campus Dining, Residence Life, Vaccination Tracking and UB Jobs posting /applicants / hires.



Working closely with campus constituents, UBIT implemented the new MyUB (powered by OneCampus) and decommissioned the legacy, home-grown MyUB.



UBIT implemented a new user interface in UBCMS, decommissioning the legacy interface.



Integrations were completed to enable use of Mailchimp for student and employee email campaigns.



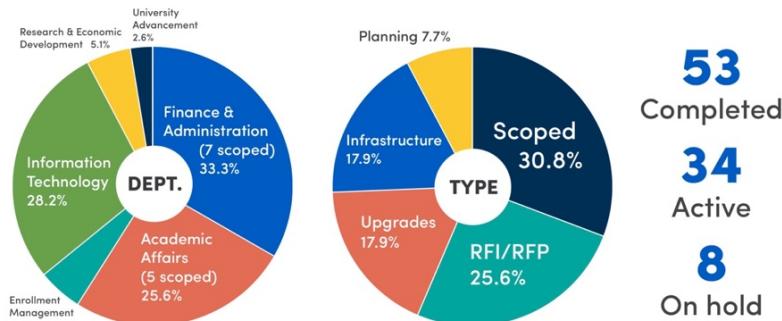
UBIT's portfolio is managed through an established governance model based on collaborative shared decision-making. The *Data Governance Council* is composed of campus leaders who meet regularly and oversee the university data decisions and IT project prioritization.

The *Data Governance Council* has appointed representatives from each of the VP areas to serve on IT Portfolio Advisory Committee (ITPAC). ITPAC members participate in regular planning meetings to provide transparency to each other on project updates, timelines and changes in top project prioritization.

There are several other key committees and Data Governance subcommittees that feed information into the shared IT governance model. These committees include the *Information Security and Privacy Advisory Council (ISPAC)*, the *Data Stewardship Committee*, the *Enrollment and Academic IT Support Committee*, the *Student IT Portfolio Collaboration Committee*, the *Faculty IT Senate Committee* and *IT Leadership/Node group* attended monthly by central and distributed IT directors.

This combined approach to IT governance prioritizes top IT projects in a fair and impartial manner. These efforts, led by the UBIT Strategic Portfolio Management Office, improves visibility and awareness, increasing collaboration opportunities, and enhancing communication around IT services and resources.

New IT project requests from across the institution are initiated through an established project intake process. All new top IT project requests go through a standardized scoping process where information is shared and a common understanding of the project requirements are documented. Overall high-level project prioritization reports are shared and discussed regularly with the Data Governance Council and ISPAC.



UBIT projects by department and type

Campus Engagement

In all aspects of its work and vision, UBIT is a highly collaborative organization. From high-level committee discussions to informal listening sessions, UBIT does nothing without careful consideration of the impacts on UB's students, faculty and staff.

UBIT annually invites faculty to a town hall-style session in which technology experts from UBIT share information about future teaching and research-related projects and solicit feedback. Through this mechanism, faculty have an opportunity to weigh in on major projects before they are implemented.

To assess these efforts once implemented, faculty are invited to participate each semester in focus groups where they are asked to provide feedback about projects implemented in the past year. Faculty are also surveyed regularly about campus technology through a collaboration with UB's Faculty Senate IT Committee.

Students are invited to participate in technology "input sessions" each semester, with the goals of gauging student opinions about existing and future IT projects on campus, identifying and remediating technology "pain points" in the student experience and soliciting ideas for new services or changes to existing services. Students are both UBIT's largest customer segment, and the most intuitive in their use of technology; students in UBIT input sessions were first to suggest an entirely student-focused tech support team (UB Tech Squad), adding Adobe Cloud applications to public computers and other technology services that were eventually adopted at UB.

Students are also surveyed each year—results of UBIT's annual Student Experience Survey dating back to 2007 are available on the UBIT website—and engaged informally at various times while using UB technology to provide their feedback. In 2022, an effort to interview students using computing sites in real-time yielded actionable results, including a decision to introduce "BYOD" ultrawide monitors to UB's computing sites in June 2022, for students to connect their personal laptops.

Resource planning and management

Similar to many UB departments on campus, UBIT is currently in a strong financial position. The state-imposed expenditure cap during the COVID-19 pandemic limited our ability to move ahead with planned equipment upgrades, end of life replacements and other enhancements, delaying those projects and expenditures to future years. We are actively exploring ways to complete more projects per year by supplementing our current staff resources with implementation vendors. Some quick wins in this area have already been realized with targeted outsourced classroom technology installations and network electricians.

The VPCIO division conducts a comprehensive multi-year (5 year rolling) budget planning process that engages all levels of the organization. On an annual basis, we identify strategic technology opportunities, review software and hardware contracts, target areas for professional development and training, renew scheduled infrastructure upgrades, refresh out-of-date hardware, evaluate staff turnover and position management, plan for the upcoming student workforce and determine priority areas for investment and improvements.

In partnership with Human Resources and our academic unit partners, UBIT is expanding our recruiting strategy to recent graduates in CS, Management and other academic programs to provide a smooth transition for graduating students (with minimal professional experience) into entry-level positions. As shown below, this may also enhance the VPCIO staff diversity. The VPCIO area is thankful for the SUNY telecommuting policy and are attempting to leverage it whenever possible to assist in recruiting.

Diversity, equity and inclusion in VPCIO workforce

Over the past ten years, the diversity of our workforce has not dramatically changed.

What has changed over the past couple of years is our focus on ensuring each member of our search committees is better educated on the importance of being non-biased. Search committee chairs are instructed to keep a close eye on the EEO report in UB Jobs that shows demographic data of applicants. Chairs are also asked to arrange for additional, targeted advertising if their pool is not diverse. All search committee members are required to take HR's "Best Practices for Conducting Diverse Searches to Hire Faculty & Staff" training. We have also partnered with Central HR and have a member of their team on each of our searches to help guide the committee.

Prior to the pandemic, UBIT had a committee working on guidelines on becoming more diverse and inclusive. We are partnering with the Office of the Vice Provost for Inclusive Excellence on training for our staff as well as other mechanisms to assist our efforts to focus on creating a culture of inclusive excellence and focusing a pipeline for staff hires from our diverse student assistants. Internships and para-professional positions provide the students with job experience that benefits both the students and UB.

Planning for the future

Network infrastructure

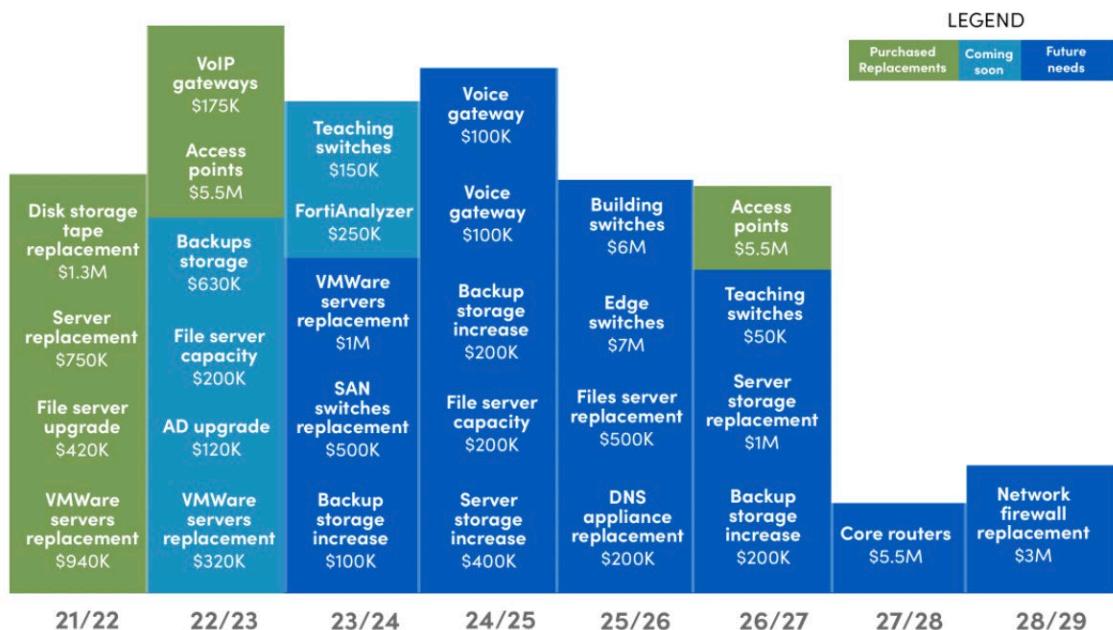
For the 2022-23 academic year, UBIT will begin design for replacing all building aggregation and telecom switches that are nearing end of life.

In terms of Wi-Fi, most access points will be upgraded by Spring 2023, with on-campus apartments and residence halls upgraded by Summer 2024 due to supply chain delays. As new hardware becomes available, outdoor Wi-Fi coverage will also be expanded.

The combined VPCIO technical teams are investigating the future of systems/services monitoring by evaluating industry best practices to determine the optimal 24/7/365 approach for UB. In addition, UBIT is looking into new licensing and infrastructure options for our VoIP phone system and the future of FAX services.

UBIT is working with Campus Leadership, Erie County and ECC Technologies on the viability of UB participating in the ErieNet Fiber project.

Timeline: Investing in UB's network infrastructure



Constituent Relationship Management (CRM)

UBIT, University Communications, and University Advancement have embarked on the selection of an enterprise-wide constituent relationship management (CRM) solution to reduce data silos and improve interactions with a wide variety of stakeholders. This project has cross-campus participation with representatives from Finance and Administration, Academic Affairs, Enrollment Management, Institutional Analysis, Research and Development and several decanal units. A recently-completed RFI will inform the ultimate product(s) selection during Summer/Fall 2022.

Further improvements to IT portfolio access

The Strategic IT Portfolio Management is transitioning to TeamDynamix, a new portfolio management tool to advance resource management capabilities. The new system will further mature our processes of collecting, managing, reporting and communicating about top level IT projects. The new tool will enable the VPCIO area to better plan and communicate about IT resource capacity and utilization, and allow us to maintain the current visibility into projects planned and in progress, and further inform project prioritization efforts.

JSMBS IT partnership initiatives

UBIT is partnering with JSMBS to help modernize their IT support and services. Our Strategic IT Portfolio Management Office is working with the Office of Medical Computing (OMC) to document and organize the work being done to support the Medical School and UBMD practice plan and align efforts with university technology standards.

In addition, our network team is working with Facilities and OMC to find a path to decommission the OMC Cary Hall/UBMD computer room and network infrastructure.

Upcoming IT security strategies

Managing risk

Technology alone has no hope of securing an organization. The most important elements of an organization's security are a culture of security and constituent awareness. To continue addressing this risk, UB's Information Security Office plans to:

- Make better use of our self-risk assessment to target specific risk more granularly
- Develop a mandatory cybersecurity training program for faculty/staff

Research data protections

A major area of high-risk university data is research data. As granting agencies and contract holders become more aware of the risks surrounding the sharing of data and the theft of personal information, more burden is being placed upon individuals to secure their data. The ISO has begun working with different offices within the VPR area to identify ways we can improve the experience of:

- Assessing and asserting security controls required in contracts and grants
- Helping individuals to understand their data security and privacy obligations
- Creating templated security plans for research studies with sensitive/restricted data
- Completing an RFP for Cybersecurity Maturity Model Certification (CMMC) gap analysis

Expansion of two-factor authentication

Two-factor authentication is perhaps one of the most important controls when it comes to securing accounts. During the 2022-23 academic year, the ISO will be looking to expand our two-factor authentication adoption to groups like retirees and alumni.

Student Information System Review

As our vendor, Oracle, is focusing their future development efforts on their cloud-hosted, software-as-a-service application, it is important for UBIT to begin planning a review of how well our existing system meets the university's evolving needs and perform an analysis of our future options.

UBIT will partner with other key campus constituents to engage consulting services and thoroughly evaluate the current satisfaction level of HUB and decide how to best meet our Student Information System needs in the future.

Door access centralization

UB door access will move to a centralized support model, away from support and oversight from SENS. Servers will be migrated to UBIT management and support, replacing the SENS rule program with a Lenel Custom Application.

UPlan budgeting system

UBIT is currently working with Finance and Administration on the selection and implementation of a campus-wide commitment and budget management solution.

Brightspace LMS

UBIT and Academic Affairs are working to implement the Brightspace learning management system to replace the existing UB Learns, powered by Blackboard. As part of the implementation, UBIT will develop integrations for single sign-on and the campus Student Information System (HUB), develop integrations with other third-party products, and implement faculty enhancements as identified.

Workflow proof of concept

UBIT is piloting a simplified and supportive self-service workflow solution to offer to the broader campus in 2022.

Conclusion

With every effort, UBIT strives to align with the university's priorities of *Student Success, Resource Management* and *Diversity and Inclusion*. We are excited about the future of UB, and eager to provide support and infrastructure to help advance UB's vision of becoming a Top 25 university.