

2016 Annual Report



INFORMATION TECHNOLOGY SERVICES

UNIVERSITY AT ALBANY State University of New York

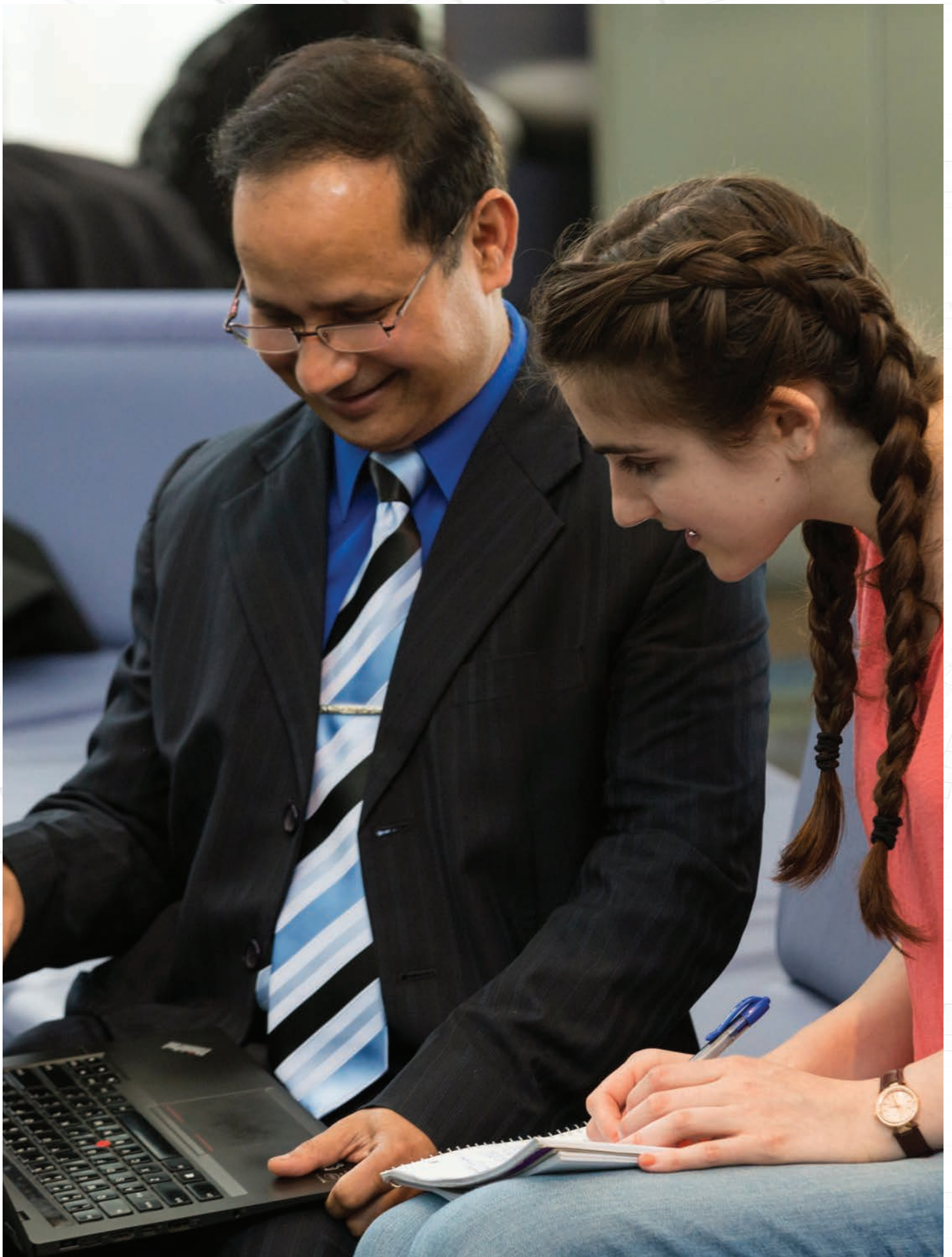
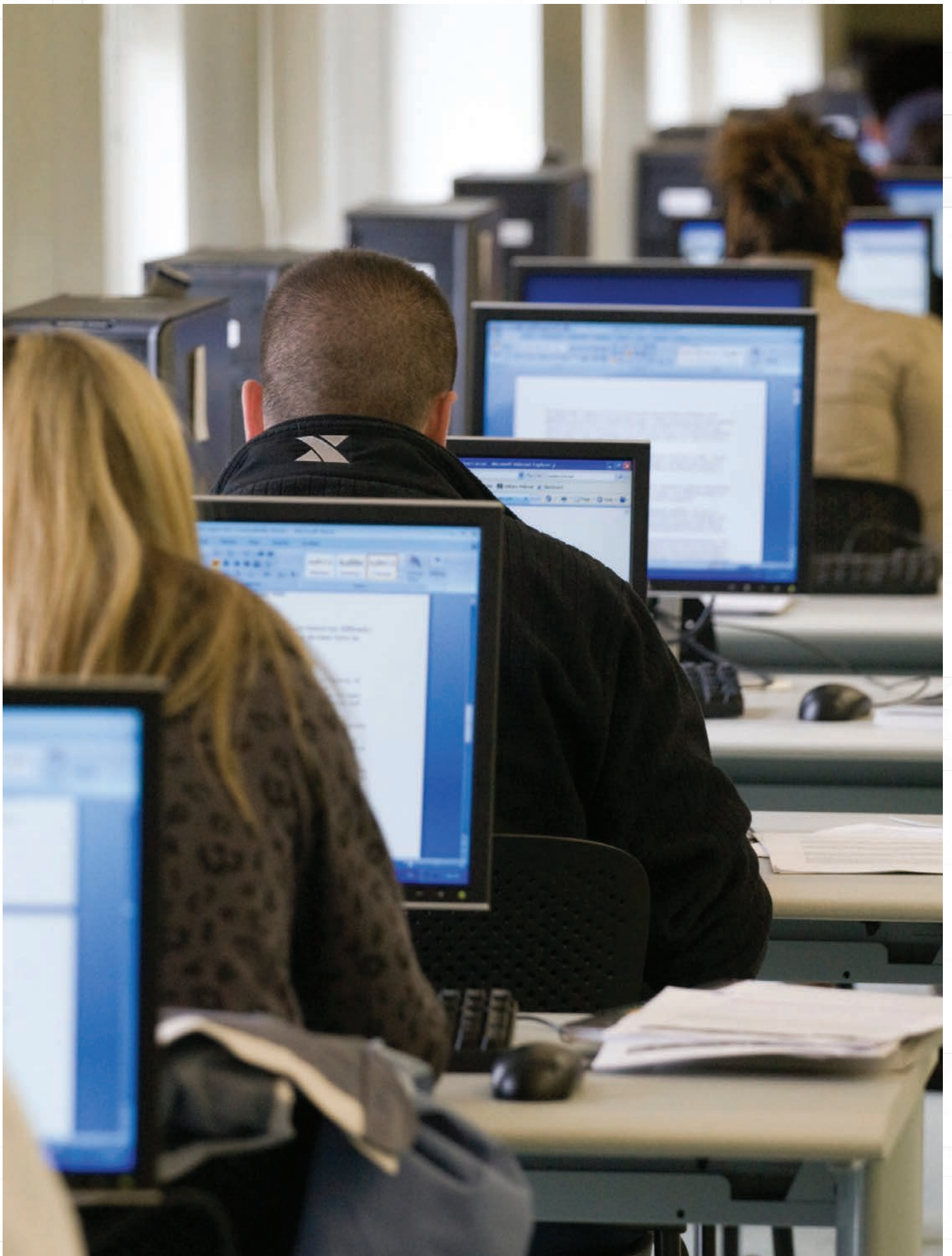


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Executive Summary

This is an exciting time for Information Technology Services.

The past year has marked a period of considerable change; the most significant of these was the hiring of the University's first Vice President of Information Technology Services and Chief Information Officer. T. Simeon Ananou, D.Ed., joined the campus community in February, 2016. A seasoned and respected executive with a commitment to servant leadership, Dr. Ananou assumed his responsibilities with great energy and enthusiasm. His vision for ITS includes excellence in customer service, a commitment to broad engagement with internal and external constituencies, and a belief that technology should be leveraged to maximize success in achieving the University's goals and aspirations. The elevation of the position from CIO to Vice President/CIO is no coincidence; this deliberate shift reflects President Jones' heightened awareness of the strategic role technology plays in support of the University mission.

Other changes are reflected in the quantity and quality of work ITS is engaged in. The need for increasingly integrated, complex technologies continues to grow at unprecedented rate, as do requests for ITS to serve in greater capacity as a partner or consultant, rather than a provider of technical services. While ITS is deeply involved in support of the University's Four Stakes and the SUNY 2020 Plan, there are numerous other endeavors demanding attention. The expansion in online teaching and learning, an aggressive research

agenda and innovative business opportunities all depend on a wide range of technical infrastructure and support; the same is true for the enterprise technologies, which drive the daily work of the institution.

There have also been a number of internal changes. A few modest reorganizations have taken place to increase synergies and efficiencies for specific work groups; there may be additional changes. A "One ITS" project was initiated to develop a new model of service delivery and increase collaboration across all organizational units; this was accompanied by physical moves to consolidate staff in fewer locations. Working more closely as a cohesive unit offers ITS new opportunities to leverage the collective knowledge of our talented staff and improve service offerings to our customers.

This Annual Report provides ITS with an opportunity to showcase the many initiatives which reflect our deep commitment to the University and its mission. As a division that interacts with virtually every other unit across the campus, it is an opportunity to celebrate our collective successes and partnerships, which are represented across six distinctive goals:

Goal 1: Supporting Innovation for Teaching, Learning and Research. This goal encompasses the many ways ITS provides tools and support to improve the teaching and research experience. From new classroom technologies to online communities to high performance computing, ITS has implemented new services, upgraded and improved existing ones, and is constantly engaged in exploring technologies for the future. Student constituencies have been served with a wealth of projects dedicated to improve learning, simplifying administrative procedures and improving the overall student experience.



Goal 2: Listening to Technology Users and Building Relationships to Improve and Anticipate Demand of Service.

Listening carefully to the needs of our constituencies today is the best way to plan for the 21st century learning needs of tomorrow. ITS is committed to building relationships with stakeholders at every level to ensure issues are understood and expectations will be met. This important work will continue, with the understanding that the foundation of every project relies on the overall health of our technical infrastructure. Given this, ITS continues to actively explore new ways to fund the foundation on which all our services depend.

Goal 3: Creating a Culture of Information Security.

An area of increasing importance, ITS is dedicated to safeguarding the University's electronic assets and educating the campus about how to best protect these important resources.

Goal 4: Fostering a Culture of Evidence Through the Use of Data, Reporting and Analytics.

Data-driven decision-making plays a critical role in higher education. Accurate metrics are key to making improvements that reinforce the University's mission, as well as the successful fulfillment of the President's Four Stakes.

Goal 5: Improving Administrative Efficiencies.

ITS is engaged in initiatives across divisions to automate processes, reduce manual practices and increase operational efficiencies. At a time when everyone is being asked to do more with less, ITS has absorbed a budget reduction by improving operational efficiencies within our own organization.

Goal 6: Strengthening Our Service Organization

Model. Last but not least, ITS is engaged in several internal initiatives that are critical success factors for supporting the 21st century needs of the institution. While these initiatives are inward-facing, they all have implications for streamlining services, improving relationships and simplifying the way we conduct business with campus colleagues.

This report encompasses the work of three CIOs. It recognizes elements of ITS's last strategic plan, which guided efforts from 2013 - 2016 under the direction of CIO Christine E. Haile. It includes the ITS Work Plan developed by Carole F. Sweeton, who led ITS as Interim CIO from July 1, 2015 - February 1, 2016.

It is further influenced by Vice President/CIO Ananou to better reflect his vision and the dynamic needs of ITS and the campus community from his keen perspective. The common theme across these plans, regardless of leadership, is the organization's dedication and commitment to supporting the academic, research and business needs of the University.

ITS looks forward to continuing its role as a dedicated partner with each division on campus. Every service offered by our organization is provided to support the success of our students, faculty and staff. We look forward to our continued collaboration, now and well into the future.





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Message from the Vice President and CIO



Friends,

As a newcomer to the University at Albany, I would like to take this opportunity to thank all of you for extending such a warm welcome to me. It is an exciting time to be at this dynamic institution and a transformative time for Information Technology Services (ITS). Both the University and ITS are organizations composed of diverse, dedicated people who put the needs of the institution first. As this mindset is consistent with my own belief in servant leadership, I am honored and energized to be part of this exceptional team.

This report includes the highlights of the many exciting initiatives ITS has been involved in over the past several years. As you will see, great progress has been made across all facets of the institution. The University at Albany's profile continues to rise as a top public institution with many nationally ranked programs, internationally-recognized faculty, and world class research. Technology is one of the critical success factors the institution relies on every day to help students, faculty and staff keep the world within reach, and ITS plays a significant role as the University continues its upward trajectory.

One of the most exciting things about working in technology is the opportunity it presents to provide the campus with solutions in support of the teaching, learning and research conducted at the University. There are also many occasions to improve business and administrative processes. My initial assessment of ITS is that we have a staff of highly talented professionals who are deeply committed to the work of the institution. This is apparent in the work that has been done, as well as the many partnerships ITS has formed with stakeholders across all levels of the University. The fostering of such relationships is critical for an organization whose sole responsibility is to help others. It is equally important for ITS to keep abreast of the trends and emerging technologies to inform the University's 21st century learning environment, and to recognize those areas where more is needed. Working collectively is the best way I know to reduce the distance between our myriad needs and the information that brings us all together.

The future at the University at Albany is very bright. In the coming months, we will invest in many exciting projects and initiatives. I look forward to hearing your ideas, and exploring the ways we can make them a reality. As we continue to get better acquainted, I hope you will do me the honor of sharing your hopes and dreams about technology. After all, ITS will only be as successful as our ability to identify and meet the needs of our colleagues, customers and communities.

In closing, I would like to express my sincere gratitude to ITS staff. In my short time here, you have not only made me feel very welcome; you have also heartened me with your dedication and commitment to the institution. I look forward to discovering the many wonderful things we will embark on together in the future.

Sincerely,

A handwritten signature in black ink that reads "T. Simeon Ananou". The signature is fluid and cursive, with the first name "T." and last name "Ananou" clearly visible.

T. Simeon Ananou, D.Ed.
Vice President for Information Technology Services and
Chief Information Officer



Progress on ITS Goals

Goal 1: Supporting Innovation for Teaching, Learning and Research

Supporting Open SUNY

The University plays a very active role in the Open SUNY initiative. ITS recently piloted a course refresh process which met SUNY-wide requirements and yielded significant benefits to UAlbany's online learning protocol. Approximately 20 experienced online teaching faculty were invited to participate in a session to review their online offerings. The instructional design team in ITS helped evaluate their courses and inspired the development of new ideas for increased student engagement. The successful course refresh process will be replicated each fall, and will focus on the course development needs of participating faculty members. The University has also adopted the Help Desk, Early Alert/Monitoring, and online proctoring and tutoring services affiliated with Open SUNY to provide online students with a robust support protocol. While these services have been used thus far by a relatively small population of students, they position Open SUNY and the University to meet and/or exceed the signature technical elements that represent the industry standard for online programming.

Tools for Teaching

The University offered 343 fully online courses in 2015-16 (down 20% from 2014-15) for 12 different academic programs. This past academic year, Blackboard was used in a total of 4,083 courses. This represents 48% of all class sections, and is up 4% from the 3,914 Blackboard sections utilized in 2014-15. There were 125,883 enrollments in Blackboard sections, which represented 76% of all academic year registrations. The number of faculty using Blackboard was nearly 70% in the Spring 2016 semester.

TERM	Total # of Faculty Using Blackboard	Total % of Faculty Using Blackboard
Summer 2015	267	65%
Fall 2015	992	69%
Winter 2016	89	95%
Spring 2016	962	68%

ITS continues to offer faculty many avenues of support for online teaching and learning. Approximately 70 workshops were offered across a variety of topics to help faculty maximize their use of technology and promote classroom engagement. In addition to the online course refresh program noted above, these workshops also included a blended learning academy and sessions with specially-funded online teaching and learning faculty.

The use of video continues to grow in University classrooms. ITS recently introduced Ensemble, a video system for faculty to add, manage and share videos. This system is integrated with Blackboard to upload videos and playlists as course materials, making it easy for faculty and students alike to share recordings. Similarly, Voicethread—a multi-media discussion board that communicates ideas with video instead of text—was piloted to a small group of faculty. ITS is in the process of making recommendations about how to further expand this service.

ITS is also involved with the University's evolving partnership with Albany Law School. Specifically, appropriate staff are charged with exploring opportunities for training and collaboration as part of this initiative.

Classroom Upgrades

Improvements to physical spaces are an important part of teaching and learning. Cyclical equipment replacements help keep technology current in classrooms across the campus. For the past 5 years, ITS has taken advantage of the replacement schedule as an opportunity to upgrade classrooms

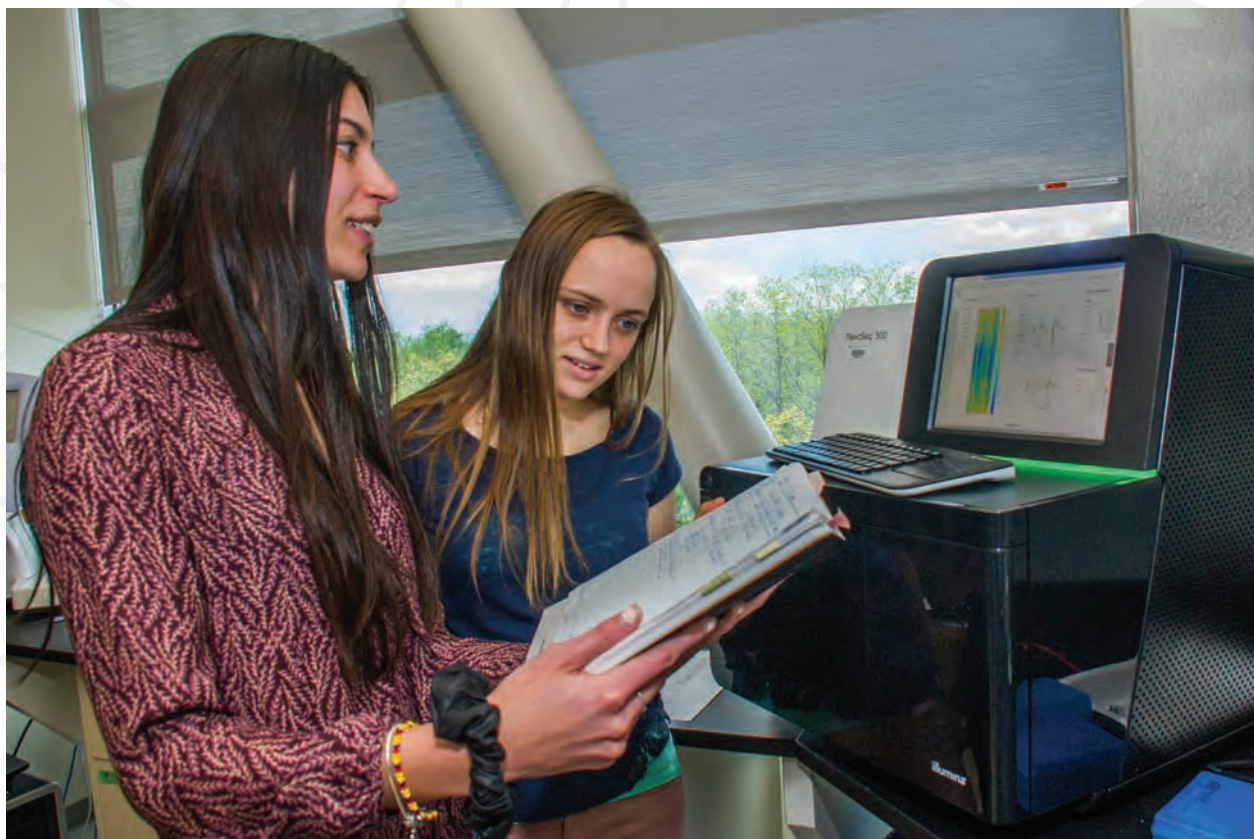
from analog to digital technologies; more than half of all rooms are completed. A collaborative endeavor with the Offices of the Registrar and Campus Planning led to the replacement of aging equipment in selected classrooms and the addition of flexible furniture to better support engagement and team-based learning. A similar effort with the Colleges of Emergency Preparedness and Homeland Security and Engineering and Applied Sciences helped develop classroom models that are conducive to specific programmatic needs in these disciplines.

A partnership with the University Libraries inspired the conversion of LI 137, part of the Information Commons in the Main Library, to become a Mac room in support of the Apple platform. As Apple products continue to grow in popularity and usability, this new space is responsive to student use and needs. Air Media, a wireless screen-sharing product that promotes sharing laptop screens, have been installed in presentation rooms in the Main Library Information Commons. Air Media is also being installed as a new equipment standard in University conference rooms, along with web cameras for video conferencing.

Another exciting development is the Faculty Innovation Studio. Phase 1 was recently completed for this unique space located in HU 39-41. The new 'sand box' provides faculty with the physical space and technology needed to support lecture capture, web conferencing and team-based active learning. Plans are underway for Phase 2, which will include the addition of studio-quality recording equipment. This will enable post-production audio/video mixing to create professional recordings, further enhancing lecture-capture services for faculty. Students will be able to use these new technologies for easy viewing and to bookmark sections of video for later review or to make inquiries of their professors.

Building the UAlbany Virtual Backpack

Virtual backpacks are under development. Designed, in part, to simplify the collection of course materials for online students, ITS is working with Dr. Sanjay Goel to create a pilot environment for faculty to define a digital set of discipline-specific materials for students. Resources range from course packs to software packages and/or access to simulation labs. Initially



being tested with students in digital forensics and cybersecurity courses, ITS hopes to expand this environment to support a growing number of students upon completion of the initial pilot. The beauty of the digital backpack concept is its ability to provide students with exactly those resources they need, particularly for those who do not physically come to campus.

Discussions are also underway to request funding to build an environment to be used by students to explore and simulate cyberattacks and other information security dangers. As the world faces an ever-increasing number of cyber threats, it is imperative to provide students with the education and experience they need to face an onslaught of increasingly sophisticated incidents and attacks. One of the best ways to address this issue is by providing a simulated environment in which to combat them. The ability to explore such activities in a safe space will serve as a powerful learning tool to help UAlbany students lead the fight against cybercrime in the future.

While these innovative initiatives have the ability to provide students with unparalleled educational opportunities, they can prove to be resource-intensive, particularly when they are piloted with relatively small populations. ITS is working with Dr. Sanjay Goal and other partners to identify additional funding sources for these powerful proposals.

Hands-on Opportunities for MBA Students

In 2015-16, ITS partnered with MBA students from the School of Business in a one-year, real-world learning opportunity. As part of their field project, students worked with ITS and the Office of Human Resources to identify efficiencies which could be gained by automating manual processes. Working collaboratively, students were able to design far more efficient processes for some of the institution's currently paper-based procedures. While this project concluded with recommendations—as opposed to implementation—they are wonderful examples of leveraging UAlbany's student talent to address the business needs of the institution. Such experiences offer the opportunity to increase efficiency while providing students unparalleled opportunities to build skills with broad applicability in the business world.

Support for Research

The University's research profile has been rising, and ITS has strengthened its partnership with the Research Division on many fronts. The past few years have seen considerable growth in high performance computing. Computational capability has expanded, providing faster processing and modeling for researchers across all disciplines.

The Snow cluster in the Department of Atmospheric and Environmental Sciences (DAES) is one such example. This sophisticated computing system allows atmospheric scientists to conduct large-scale research of various weather phenomenon. The system can be reconfigured on demand to provide individual investigators with dedicated, reserved resources or to work as a single large system. Similarly, the Atmospheric Science Research Center (ASRC) relies on its own cluster to provide computational power to approximately 12 researchers. In 2015, UAlbany partnered with the New York State Division of Homeland Security and Emergency Services and the National Weather Service to offer NYS Mesonet, a statewide system providing the community-at-large with real-time, 3-D data for identifying and managing extreme weather events.

ITS supports all manner of research, not just that which is funded. A general purpose high performance research computing cluster is available for unfunded research, and may also be used by teaching faculty and their students. In all cases, ITS works with researchers to ensure they have proper resources and the ability to collaborate with others on and off campus. The continued growth of this high performance computing cluster allows researchers to run analyses with large data sets with increasing efficiency—an important factor for this valuable communal resource.

A Collaboration Platform for Health Disparities Research

The Office of the Vice President for Research and ITS are working closely to spearhead the design, development and implementation of the first digital collaboration space aimed at research focused on the eradication of health disparities. "On behalf of the Division for Research, I am pleased to be partnering

with Vice President for Information Technology Services (ITS) and CIO Simeon Ananou and his ITS leadership team on the joint development of a pioneering SharePoint Collaboration Platform designed to foster enhanced researcher collaboration and productivity,” says Jim Dias, Vice President of Research. “The platform is bringing researchers from across the University at Albany together with scientists and clinicians from SUNY Downstate Medical Center in a cloud-based environment with the shared goal of advancing collaborative research aimed at eradicating health disparities and health inequality. This transformational platform is, for the first time, providing access to real-time information, searchable researcher profiles, funding opportunity announcements, a synchronous communications portal, a collaborative online working environment, a library of disciplinary relevant resources, and a range of other tools and applications – all located and integrated in one, cloud-based community. I am confident that the SharePoint Collaboration Platform’s design focus on portability/transferability, automation, and ease-of-use will not only serve our health disparities researcher community well, but will enable the development of additional instances of collaboration platforms using the developed template. I would like to extend my wholehearted thanks to Vice President and CIO Ananou and ITS for their exemplary service, creativity, hard work and dedication to making the SharePoint Collaboration Platform a reality, which will no doubt enhance the research environment for our faculty and scholars across the University for years to come and engage our partners in meaningful productive discussion and collaborative research.”

While this project is still in the development phase, the SUNY Research Foundation has already expressed interest in the innovative platform, which may serve as a model for other discipline-specific research communities in the future.

Realizing the UAlbany Advantage

University leadership is invested in a multi-faceted student retention plan. Led by Provost Stellar and supported with a multi-million dollar grant, this umbrella initiative is known as the UAlbany Advantage. One of the headliners in this endeavor is the

implementation of the Student Success Collaborative (SSC), a resource offered by the Education Advisory Board. Designed to facilitate cross-department collaboration between advisement, student services and student affairs roles, this powerful tool uses predictive analytics to assist advisors in helping students make successful academic career choices. ITS is heavily involved in the tailored construction of the statistical model that makes predictions of academic success. While SSC will initially be rolled out to incoming freshman, further expansion is expected.

College Scheduler is another shining star for the UAlbany Advantage. This new platform, currently utilized in the Advisement Services Center (ASC) offers students a seamless experience for building their schedule. Students enter the courses they want to take, the times they are available, and the system returns every possible combination of courses based on their request. “This technology is light years ahead of the pen and paper model we currently have in place,” says Dr. JoAnne Malatesta, Assistant Vice Provost for Undergraduate Education and Director of the Advisement Services Center. “The product links to our retention and graduation initiatives by allowing students to access a comprehensive set of course options to develop schedules that best meet their individual interest and needs. This has the potential to increase enrolled credit hours and reduce the time to degree completion.”

College Scheduler has other benefits, too: the ASC will have the ability to review course requests and see what classes students are looking for, and compare them to the courses that are available. It can be integrated with Degree Works, the University’s new degree audit system, so requirements will load automatically as part of the recommendations for course selection. It will also highlight problematic patterns during the registration process, allowing advisors to rectify issues during the registration cycle. This host of improvements will free up students and advisors to focus on guidance, advice and the overall student experience, rather than the task of selecting courses.

A soft rollout of the system is in place this summer for incoming freshman and those transfer students who are advised in the ASC. This fall, the system will be

made available to all students and advisors for Spring 2017 Advance Registration. Plans for marketing and training are underway to provide everyone with a smooth transition to the new system.

UAlbany Mobile App and Digital Strategy

ITS has worked closely with the Office of Communications and Marketing on the UAlbany Mobile App introduced in Fall 2015. This 21st century tool assists students with a wide range of transactional information that simplifies their lives—from viewing class schedules to finding an available washing machine or learning when the next bus will arrive at a particular stop. Two versions were deployed last year—an initial model was rolled out at the beginning of the academic year, followed by an upgrade based on student feedback. ITS and Communications and Marketing continue their work with focus groups across campus to identify new features, which will be incorporated in the next release.

The ITS/Communications and Marketing relationship is further committed to the development of a comprehensive digital communication strategy. This will include a new University website supported by modernized technologies with an intuitive, user-friendly interface for content owners; work is expected to begin this summer. This strategy included a Jumbotron installed in University Hall to promote information about the University. A coordinated effort to install Visix, a digital signage platform for similar information sharing for closed circuit TVs is being implemented across the campus.

Goal 2: Listening to Technology Users and Building Relationships to Improve and Anticipate Demand of Service

Maximizing Resources: Fulfilling the Potential of the University Data Center

The University Data Center is realizing its full potential as a resource for the campus and Capital Region alike. The LEEDS Gold, Tier III-certified facility began housing University equipment in August 2014; several departmental IT groups are now utilizing rack space

in this facility. CAS Computing and the University Libraries were among the first tenants; they have since been joined by ASRC, DAES, the School of Public Health, the Department of Computer Science, UPD Traffic Management and others. Empire State College uses the facility as their primary data center. The facility will soon serve as a backup location for Hudson Valley Community College, fulfilling a reciprocal arrangement between our institutions. At the writing of this document, ITS is working with targeted government agencies to execute an MOU for colocation; physical occupancy of the Data Center will be at optimum capacity within the next 18 months. In the coming months, tenant needs will influence ITS's next steps with regard to compliance, physical security, and other industry-standard characteristics. The combination of a concurrently maintainable facility and limited comparable resources in the region make the data center a valuable commodity not only for the University, but also for the SUNY System, the Capital Region and beyond.

Expanding/Refreshing Critical Infrastructure

As the University progresses towards its goals and aspirations, the need for a robust, redundant network infrastructure cannot be understated. Infrastructure readiness is a critical success factor for supporting a 21st century learning environment. Expanding the network, adding and replacing wireless access points and addressing other aging equipment are just some of the technical deficiencies which need to be addressed. ITS is making improvements with existing resources and is engaged in discussion with campus leadership to identify permanent funding to support these critical services.

Residential Network. Over the past year, ITS has worked closely with Residential Life and Apogee, Inc. to improve the network in all University residence halls. Beginning with the 2016-17 academic year, students residing in dorms will see significant improvements in connectivity. Internet speeds will increase from 10Mb/s inbound and 1Mb/s outbound to 75Mb/s for inbound and outbound traffic; the service can be shared between 5 devices (up from the previous restriction to 3 devices). Students may choose to purchase additional bandwidth and/or

voice services as well. Support for all Apogee, Inc. services is available 24x7 and includes an on-site technician.

University Network. ITS has developed a phased approach to address the University's aging infrastructure with existing funds. The first phase of this 3-5 year plan is to conduct an independent assessment of the University network to identify opportunities, risks and gaps requiring immediate attention. This phase, which will be completed over the summer, will help ITS prioritize the work needed to meet campus demand. It has also helped ITS establish a direction for implementing new network technologies, which will increase performance while maintaining cost efficiencies. The completion of Phase 1 paves the way for Phase 2, which will begin in late summer 2016. At that stage, efforts will focus on evaluating network monitoring systems to ensure their compatibility with the new hardware. Upon completion of Phase 2, active deployment of new equipment will begin and continue for the next 24-36 months until installation is complete.

This will be a complex project, and will require considerable coordination in order to minimize disruption to the campus community. Yet, it also represents one of our most important projects, as the network infrastructure is critical. These collective efforts will result in significant improvements to the network, thereby contributing to the success of the University's many 21st century goals and aspirations.

Preparing for Business Continuity/ Disaster Recovery

The University's electronic assets are well accounted for in the event of an emergency. The University Data Center is a concurrently-maintainable facility, which provides redundancy for enterprise IT services. An alternate data center operates at Hudson Valley Community College; ITS is in the process of replacing aging equipment in that location. Discussions are under way with other organizations and entities, including several SUNY institutions, to assess UAlbany's ability to serve as a backup site. The combination of the sophisticated facility and its accessible location will help secure the University's position as a leader for helping others plan for business continuity.

While ITS clearly plays a significant role in campus IT disaster planning, many staff are also involved with the University's Emergency Management Team. Several employees volunteered to participate in the FEMA certification process and are preparing to serve the University however necessary in the event of an emergency.

Supporting Campus Expansion

Technology has become such a ubiquitous part of everyday life, it's no surprise that IT needs warrant consideration every time the campus engages in new construction or the rehabilitation of physical spaces. The past decade has represented a period of remarkable growth for the University, and this will continue to be the "new normal" in the foreseeable future. ITS plays a significant role in the construction of ETEC, the College of Homeland Security and Emergency Preparedness, the College of Engineering and Applied Science, the Campus Center expansion and Building 25 rehab. Other initiatives, such as the Blackstone LaunchPad, rely on numerous IT resources for successful implementation. ITS plays a critical role working with Facilities and other campus partners to ensure that all construction projects properly account for the use of technology, now and well into the future. Up-front participation on the part of ITS is a critical success factor for such initiatives. The Jumbotron in University Hall referenced earlier in this document is an excellent example of how ITS must work with a wide range of partners to ensure the campus can rely on robust technologies in support of University services.

Establishing IT Funding and Governance Support Structures

ITS is engaged in an on-going process to establish a campus-wide governance model that helps the University understand the true cost of IT services, and assists in the process of maximizing technology as a strategic resource. In terms of cost, it is imperative to devise sustainable funding models that support both critical infrastructure and the attendant needs of teaching, research and business operations. It is also important for the campus to develop a governance framework that will enable

IT resources to be prioritized at the campus level. To this end, ITS recently hired its first Portfolio Manager to facilitate a transparent process for managing projects and services across the University. These combined efforts will help ensure the campus is able to leverage technology as a strategic resource with a deep understanding of the fiscal and human costs associated with IT projects and services.

Goal 3: Creating a Culture of Information Security

Protecting the University's Electronic Assets

Despite the fact that the University is under constant siege from a wide range of attacks by cyber criminals, the institution is well-prepared—and well known—when it comes to protecting our electronic assets. Information Security Officer Martin Manjak was recently elected by his peers to serve on the REN-ISAC (Research and Education Networking Information Sharing and Analysis Center) Board. The mission of this international, member-driven organization is to aid and promote cybersecurity operational protection and response within the research and higher education communities. Manjak and his team have earned a well-deserved reputation for the many contributions they have made to information security practices across the SUNY system and beyond. Security classes are routinely offered to students, faculty and staff to help them protect their electronic assets. Custom courses are available upon request; approximately 300 members of the campus community have participated in sessions specifically tailored for their department/division.

One of the most important aspects of any information security program is education. Even the savviest of cyber criminals relies on the susceptibility and vulnerability of unsuspecting victims. The Information Security team works closely with University Internal Controls to provide hands-on security training; additional plans and programs will be offered in 2016-17. All programming is available to the campus community to protect all manner of information assets.

The Security team continues to explore other behind-the-scenes initiatives to further safeguard the University.

Some of these include evaluating our authentication and password change processes and ensuring that new technologies are implemented in a manner consistent with internal controls and access protocols.

Goal 4: Fostering a Culture of Evidence Through the Use of Data, Reporting and Analytics

Using Business Intelligence for Data-Driven Decision Making

Great progress has been made with the University's Business Intelligence (BI) platform. For the past several years, ITS has worked closely with Academic Affairs and Institutional Research to provide deans and a select number of departments with the information they need to make data-driven decisions. While this resource was initially limited to a relatively small group, the powerful resource will soon be accessible to additional members of the campus community. ITS continues to work with partners to define data attributes, draft a meta data strategy and ensure best practices around the use of key indicators and predictors.

The EAB SSC initiative (see Goal 1) plays a significant role in building a culture of evidence for the University. Increasing the amount of information retained in our Business Intelligence system means having additional data to make decisions. In the coming months, admissions data will be integrated into this system. This information will prove valuable in numerous ways, particularly for the University's student retention plan.

Last, but certainly not least, ITS is spearheading a process to develop a data governance model to guide future BI work. The end goal of this initiative is to create a UAlbany library of data definitions that can be used across all campus divisions. Because data is currently drawn from multiple sources, a common definition across data attributes is critical for making sound decisions. The goal of governance is to assure the quality of new information as it is added to the system.

Goal 5: Improving Administrative Efficiencies

Working Smarter Through Automation

A challenge faced by many campus departments is the proliferation of paper. Many offices are heavily dependent on form-driven processes that hinder their ability to conduct business and make poor use of limited resources. ITS has engaged with several administrative departments to create technical

solutions designed to maximize productivity and efficiency. In some cases, students are involved in this hands-on solutions, as evidenced above in Goal 1. In others, ITS partners with offices to understand their processes and associated challenges, then works collaboratively with that group to identify potential solutions. There are now many products designed to replace dated, manual forms processing, which allow for efficient, effective ways of doing business. Here are just a few examples:

Problem/Solution	Office Currently Using Service	Status/Benefits
Perfect Forms. This automated tool helps offices keep form-based activities simple and straightforward	Office of the President (pilot)	An easy-to-track workflow process saves time and streamlines efforts. This product is being piloted in Summer 2016 and will be evaluated for further use and expansion
Exploring HRM automation. ITS is working closely with HRM to define and automate many of the processes that dictate the critical work of this department. Part of the process includes identifying and prioritizing what should be automated, and when	Human Resources Management	Improving business functionality for HRM will have benefits for virtually every department on campus that relies on their services. ITS is working closely with HRM to ensure an in-depth understanding of their needs and processes. This is critical for organizing business requirements and making decisions that will help determine how to best move forward
ITS is evaluating enterprise-wide imaging and making workflow assessments based on new technologies that are now available	Currently the Office of the Vice President for Research	This assessment has far-reaching implications for other divisions. This initiative is expected to expand later this year, and has the potential to facilitate workflow across numerous divisions and departments in the long term
Better use of electronic resources. ITS has recently leveraged some of the technologies available to the campus to reduce our own use of paper. The paper-based process used to capture the moves, adds and changes associated with telephony has moved to an electronic format	Information Technology Services	Reduces the dependency on paper-based forms by providing a green solution. Offer greater consistency to ITS customers by moving almost 20 paper forms into an electronic ticketing system, thereby increasing greater efficiencies in processing

Smart Scheduling and Development Processes

The University's Event Management System (EMS) is helping to create a comprehensive University repository for room calendars and scheduling. This online tool provides valuable information about class and conference rooms, ensuring those who use it can be confident the spaces they reserve have the resources to meet their needs. Initially used primarily by the Office of the Registrar and Facilities, EMS is now the scheduling standard for class and conference rooms. As additional resources are moved to this platform, they lose their designation as departmentally-owned spaces and become University resources. This has far-reaching benefits for creating new efficiencies and consistency in the utilization of campus facilities. Full adoption of EMS is expected within the next year.

ITS is working with University Development to explore technology solutions to address future campaign needs. A joint proposal was submitted to replace Colleague, the current fundraising and donation system. Considerable groundwork will be necessary to make good decisions

and prepare for the implementation of an upgraded or replacement system. Preparatory work is already underway, regardless of whether this proposal receives funding. The replacement program is expected to streamline the donation process, providing Development staff with the 21st century fundraising technology needed to identify prospective donors, track giving history, and easily execute campaigns to manage and grow our endowment.

Planning for the 2019 IAS Upgrade

The University's Integrated Applications System (IAS), which includes all student and employee records, is due for a major upgrade in 2019. The impact to the campus will be significant, affecting all users of these critical enterprise systems. ITS is working to rally people now, soliciting their engagement to participate in the planning required for this initiative. As there has not been an upgrade of this magnitude in several years, involvement and support from across the University is extremely important.



Streamlining Efficiencies in the ITS Budget

Like all campus divisions, ITS was recently asked to absorb a .05% reduction of our overall budget allocation—for ITS, this represented a decrease of nearly \$40,000. ITS was able to yield significant savings in this process.

Description	Amount	Notes
Reorganization of Telecommunications and Messaging and Collaboration Services Groups (see Goal 6)	\$102,000	Savings from this consolidation funded the creation of a Portfolio Manager position
Awarded a SUNY High Needs grant with Dr. Sanjay Goel in support of the digital backpack initiative (see Goal 1)	\$50,000	
Used Creston points to purchase classroom replacement equipment	\$10,000	
Reduced SPlus license to reflect reduced usage	\$7,600	It is common practice for ITS to assess use whenever licenses are renewed/maintained to ensure budget resources are being used in the most efficient manner
Elimination of Ghost software maintenance	\$7,500	
Eliminated budget line for Blackboard training materials	\$2,500	This resource was no longer needed
Overall reductions in paper use		\$1,100
ITS engaged in additional activities resulting in increased efficiencies; these gains did not result in increased funding		<p>Some examples include:</p> <ul style="list-style-type: none"> • Cost avoidance by continuation of Marketplace solution • Consolidation of SLSC and Parking Management application to make better use of human resources • Introduced Project Online free solution for project planning across ITS • Use of University vehicle to avoid reimbursement for personal vehicle use • Deployment of Skype for Business • Desktop staff reassigned to reduce travel and promote better response times

Goal 6: Strengthening Our Service Organization Model

Looking Inward: Making Internal Changes to Serve Our New Service Model

ITS is fully engaged in an organizational effort to redefine its service model and rethink the way the division conducts business with the rest of the institution. The long-term goals of this initiative are to improve the overall business model and promote increased collaboration, greater transparency and better organizational health across the team. While the following initiatives are broken out to provide greater depth and purpose, they are all key components of the larger effort to promote “One ITS.”

Refining the ITS Physical Space Footprint

While the benefits of the University Data Center and IT Building (ITB) were expounded upon in Goals 1 and 2, this facility served as the catalyst to change the overall ITS physical footprint. Prior to the building of this facility, the ITS staff of ~114 resided in nearly 10 office locations across the Uptown and Downtown University campuses. The initial move into ITB initiated a series of domino moves that are currently in progress; these are outlined below. When all these moves are completed—which is expected in early 2017—ITS staff will reside in 4 locations across 2 campuses. This represents significant consolidation, collaboration and synergy across the organization. All space planning activities have been conducted in partnership with the Offices of Campus Planning and Architecture, Engineering and Construction Management.

- Move to ITB, August 2014 – Equipment was moved out of the old data center in the CS 5 area into ITB. The vacated space was earmarked for new student-facing services on the academic podium
- Move to ITB, October 2015 – Approximately 50 staff from the Podium, UAB and MSC were permanently relocated to the new facility
- Move to ITB, February 2016 – The staff of the group formerly known as Telecommunications moved from MSC to ITB

- Move to MSC, February 2016 – Almost 20 Client Support Services staff moved from the academic podium to MSC. This allowed ITS to return several podium spaces for academic use—LC 10, LC 12, and LC 15, to name a few
- Move to UAB, March 2016 – The Enterprise Application Services team of ~30 staff moved to a temporary location in UAB to allow for the rehabilitation of the first floor of MSC
- Upcoming moves to MSC/on Podium – Client Support Services staff serving the ITS HelpDesk will permanently relocate from LC 27 to MSC. This will free up space for Test Scanning Services, the only ITS service remaining on the CS hallway, to relocate in LC 27. This will complete all moves on the podium, with ITS retaining only the walk-in HelpDesk in LC 27 and the sub-basement area below this popular location
- Upcoming move to MSC – Enterprise Applications Services staff will be permanently relocated from UAB to MSC. When this final move is complete, all ITS staff housed in this Western Avenue location will reside together on the second floor of MSC



Re-imagining the ITS Organization and Service Model

The combination of many ITS-wide organizational efforts ultimately resulted in some changes in structure. These initiatives were undertaken to promote greater efficiencies, effectiveness and improve collaboration and synergy across units:

A New Portfolio Manager. ITS hired our first-ever Portfolio Manager in April 2016. The purpose of this reassignment was to entrust someone with the responsibility and oversight to create and administer a transparent project and portfolio management process. One of the primary responsibilities of the Portfolio Manager is to better define the ITS service model. This will include defining a model of the next generation of IT services, including service ownership. Service owners will be identified to assign accountability for end-to-end service delivery. This will entail ITS employees to work more holistically to streamline service delivery, thereby better meeting the needs of our customers.

In the coming months, the Portfolio Manager is expected to develop processes and procedures that will inform decisions about what IT projects the campus should invest and engage in going forward. The democratization of IT services will help ITS clarify its service offerings, as well as help customers understand how to best get their projects initiated and completed.

A New Governance Model. Vice President/CIO Simeon Ananou is in the early stages of establishing a campus-wide IT governance model. This process is intended to engage stakeholders in better understanding and evaluating the use of technology across campus, including how to best prioritize technology initiatives. This will dovetail nicely with the new project and portfolio management process described above.

Building a Culture of Assessment. ITS has limited history in conducting surveys to assess customer satisfaction and identify areas for improvement. This is about to change, as customer feedback is an important way to assess how service offerings meet the needs of our customers. An effort is currently

underway with Institutional Research (IR) to conduct a satisfaction survey of students, faculty and staff in Fall 2016. The results will be used to inform decision-making, and identify where additional assessments are needed to improve satisfaction. In order to develop a sustainable culture of feedback, ITS will continue working with IR to develop ongoing protocols for periodic assessment including surveys, focus groups and other tools to better understand customer satisfaction and improve services.

Consolidating Services. ITS recently made two organizational changes to better reflect cross-unit synergies and combine complimentary services. The Office of Telecommunications was combined with Messaging and Collaboration Services into a new group named Communication and Collaboration Services. While the impetus for this change was to accommodate reassignment of the new Portfolio Manager, an examination of the work of these respective groups justified their alignment. While this transition is still underway, the model is proving to be a more effective way to manage this collection of services.

With the departure of Telecommunications from the unit, the Enterprise Infrastructure Services (EIS) team established an Infrastructure Project Management group as a separate unit in EIS. The new structure provided the necessary focus on developing consistent procedures for this type of work, and forging new relationships with partners across the campus.

Similarly, Enterprise Application Services (EAS) and Enterprise Infrastructure Services (EIS) have combined server and storage administration with middleware/database/web teams on an interim basis for the next 6 months. This measured time period will allow ITS to fully evaluate the value of combining these groups, providing the basis of a long-term recommendation. At the writing of this document, this transition is in its infancy, yet holds the promise of creating new alignments and a better team structure to support ITS' new service model.

A New Ticketing System. As part of evaluating the new service model, ITS is examining management processes and tools to replace Footprints, the current customer service ticketing system. While this project was initiated just a few months ago, it may include opportunities to participate in a broader SUNY shared services initiative.

Developing Internal Operating Procedures

Part of the One ITS initiative includes the cataloging and standardizing of a variety of organizational operating procedures. This ensures that ITS staff across all divisions have a common understanding of how ITS conducts business, sets expectations at all levels of the organization, and codifies standard practices and procedures. Building internal consistency is important to good organizational health. Common practices can have a cascading effect when and where they overlap with IT service delivery.

Filling ITS Vacancies

Over the last two years, ITS filled several vacant positions due to retirements and other forms of attrition. As a general rule, ITS reevaluates all positions before filling them in order to reflect current organizational needs and assess technical skill sets. Many new staff have been hired to fill specific, emerging needs including, but not limited to, project management, applications operations, teaching and learning, and web solutions. In recent months, ITS staff have been asked to create individual professional development programs to identify areas where they want to build and/or refresh their skills, as well as identify new areas of interest. Investments in professional development are important for staff engagement and building the necessary skills to provide excellent customer service and support.





Conclusion

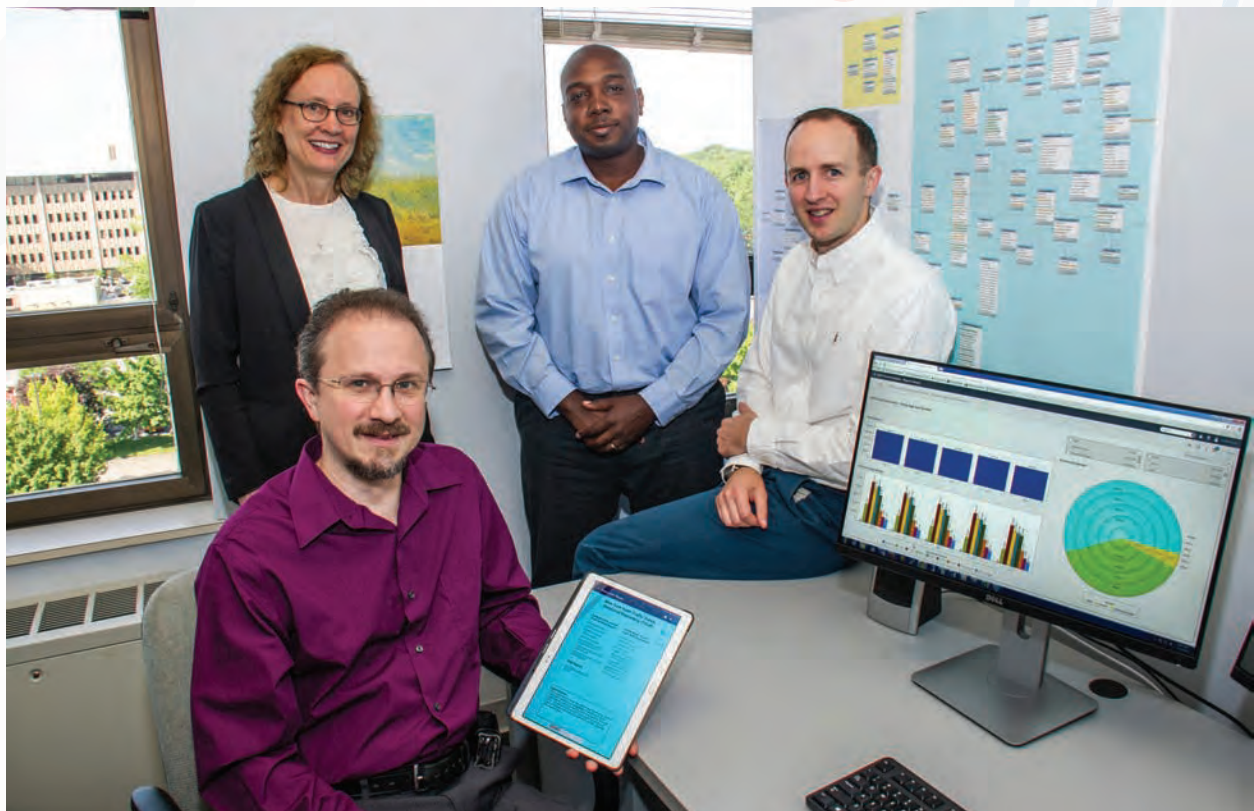
While the past several years have yielded many changes and improvements to campus IT services, the future is full of promise. While some projects have already been identified—such as President Jones' Four Stakes or the SUNY 2020 Plan, others can be predicted—such as the network refresh, supporting the academic development of our new colleges, expanding research and the use of the new University Data Center. Still others have yet to be defined—through technical innovations, new collaborations, and the power of imagination.

It is not just the technology that will change. Many of the internal ITS initiatives described above will also come to fruition in the coming months and year. The development of a new service catalog and model for service delivery, a new governance structure, and culture of assessment will help ITS to facilitate a 21st century learning environment for students, faculty and staff. The ITS leadership team will also embark

on a new strategic planning process which is expected to focus on the following areas:

- Operational efficiency and the automation of processes
- Analytics to support and influence institutional trends and decisions, especially in the area of student success and retention
- Information security and awareness
- Professional development
- Transparent community engagement. This should include the review of funding models and the development of a cyclical technology replacement plan. (We have completed a multi-year infrastructure replacement plan; eventually we will develop a comprehensive replacement plan for all ITS)

As always, the success of any technology-related initiative is only as strong as the partnership on which it is based. We look forward to working with you.





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