IT Strategic Plan 2022-25
Introduction
This is a time of exponential increase in need for information technology services at the University at Albany. The last few years have demanded changes as never before, with technology playing an integral role in every aspect of university life. From recruiting and retaining students, to bringing state-of-the-art facilities online, to complying with health and security mandates, Information Technology Services (ITS) addresses change by following its long-established practice of working collaboratively with campus partners. This IT Strategic plan offers rich opportunities to better understand multifaceted needs and establish technical direction across this dynamic research institution. It also plays a key role in meeting Middle States requirements by aligning efforts to increase campus engagement and fostering transparency in IT decision-making.

Overview of ITS
ITS is the centralized provider of campus technology. The mission of the organization is to anticipate and provide sophisticated information technology services that deliver inclusive and engaged user experiences to the campus community. Led by the Chief Information Officer (CIO), ITS employs ~100 staff who provide a wide range of services and support across all three campus locations. A central business office, project management office, service portfolio manager, and a communications strategist support ITS staff in these key areas. ITS is part of Finance and Administration, with the CIO reporting to the division vice president.

Consistent with several other technology organizations in higher education, ITS has adopted the Information Technology Service Management (ITSM) industry standard for work management. This approach offers a holistic technology experience by focusing on customer needs and continuous improvement across eight service categories:

- Administrative and Business
- Communication and Collaboration
- Desktop and Mobile Computing
- Information Security
- Infrastructure
- Research
- Teaching and Learning
- IT Professional Services

Nearly all work in ITS is aligned by defined service areas. ITS staff are assigned to various service teams and engage in a wide range of activities. Service management work encompasses the requests, incidents and other operational activities that support offerings provided by ITS. Projects, on the other hand, represent enhancements and improvements to existing offerings, and often encompass new offerings and solutions.

The ITS Project Portfolio currently contains over 250 projects. While many of these were initiated by ITS to advance and improve campus technologies, nearly 45% represent requests from other units to meet specific departmental goals and priorities. In nearly all cases, these initiatives cannot succeed without a significant commitment from ITS. As the demand for technology typically outpaces ITS staff availability, this may result in conflict over competing priorities. One of the benefits of an IT strategic plan is the direction it offers to address issues of this nature.
Overview of the IT Strategic Plan and Guiding Principles

The IT Strategic Plan forecasts campus IT direction for the next three years. Defined by a set of guiding principles and goals, the Plan is aligned with the University’s priorities and signature strengths. An open, engaging process provides ITS with continuous input regarding projects and services from representatives across the campus community with an annual refresh cycle to ensure the Plan is always current.

At the end of each fiscal year, ITS updates the IT Strategic Plan by reviewing progress made during the past year, highlighting recent accomplishments and updating goals for the next three years. Over time, as goals are accomplished and guiding principles evolve, they will be refined and amended to keep reflecting the progressive technology needs of the campus community. By establishing this continuous process of planning, execution, and recalibration, ITS expects to foster deep engagement with the University and increase transparency about how IT decisions are made.

The following guiding principles reflect ITS’s current tactical direction:

▪ Advance campus partnerships by increasing engagement, reporting, and transparency using a service-based focus
▪ Improve responsiveness by introducing rapid delivery tools and reducing the use of technologies that require ITS staff to spend time on low-value work
▪ Operate vendor-supported hardware and software
▪ Workforce role realignments are expected in IT as both campus needs and technologies change
▪ Support the University’s commitment to sustainability

ITS Advisory Committees and Campus Input

One of the most essential elements of the IT Strategic Plan is the opportunity it provides for campus engagement. Continuous feedback from across the community is critical to ITS for planning purposes and improving the end-user experience.

In January 2021, ITS established ITS Advisory Committees to align with three of its customer-facing service areas: Administration and Business, Information Security, and Teaching and Learning. These groups are composed of representatives from across the institution to provide input on ITS projects and services. Agendas cover a wide range of topics, such as updates and changes to existing services, projects in the ITS portfolio, resource availability, and any issues or concerns.

In the area of research, ITS solicits similar input by leveraging existing campus groups. These include the Vice President of Research and Economic Development and activities sponsored by that office, such as the Research Coffee Hour, the Research Data Security Working Group, and the Research Data Governance Council. ITS maintains relationships with various centers, institutes, labs, and individual researchers, who may also be called upon to provide information and feedback. A formal Research Advisory Committee will not be formed unless the current approach proves insufficient.

All ITS Advisory Committees understand the need for ITS to develop a strategic plan and are aware of the valuable role they play in the process. These committees understand the opportunities and challenges ITS faces in delivering an increasing number of projects, services, and competing priorities. The process for leveraging each Advisory Committee to develop shared goals and objectives and then review and report on progress over time is still in its infancy. ITS will adjust and refine that process and
schedule in a cycle of continuous improvement. Over time, ITS hopes that engaging committees in the complexities of IT decision-making will provide new perspectives and a shared understanding of the challenges associated with staffing, funding, and prioritization.

As part of the planning process, iterations of the IT Strategic Plan were shared with ITS Advisory Committees for feedback and updated to reflect their input. In May, it was shared with the President’s Executive Council in advance of an open comment period for the campus feedback to finalize the plan.

See Appendix 1 for ITS Advisory Committee membership.

**IT Strategic Plan Timeline**

<table>
<thead>
<tr>
<th>Month</th>
<th>Action</th>
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<tbody>
<tr>
<td>January – February 2022</td>
<td>Develop IT Strategic Plan, Guiding Principles, and Goals. Introduce and iterate with ITS Advisory Committees</td>
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<tr>
<td>March – April 2022</td>
<td>Continued iteration with ITS Advisory Committees. Present to divisions and key stakeholders for feedback</td>
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<tr>
<td>May – June 2022</td>
<td>Present outline to President’s Executive Council. Complete draft plan based on feedback. Share and finalize with ITS Advisory Committees</td>
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<tr>
<td>July 2022</td>
<td>Continued development and preparation of document for Campus Comment period</td>
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<tr>
<td>November 2022</td>
<td>Campus Comment period. Finalize plan based on feedback</td>
</tr>
<tr>
<td>November – December 2022</td>
<td>Publish and disseminate IT Strategic Plan</td>
</tr>
<tr>
<td>July 2023</td>
<td>Update IT Strategic Plan with recent accomplishments, highlights, and forecast activities for the next three years.</td>
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**3-Year Goals by Service Category**

The IT Strategic Plan consists of 3-year goals for each service category representing priority and direction in each area. Goals were established through an iterative process with their respective ITS Advisory Committees (where applicable) and ITS leadership. Goals will influence the development of 3-year roadmaps for each service area which, in turn, will inform future projects and initiatives.

In addition to establishing goals for each IT service category, ITS has identified goals focused on organizational improvements to advance diversity and promote new skillsets.

**Administrative and Business Services Category**

The services included in this category encompass an enormous range of activities that impact every member of the campus. From students to faculty to researchers to staff, a tremendous number of transactions and processes are conducted every day, with many of them relying on aging, unsustainable technologies. Modern, faster, and more user-friendly systems and applications are needed to respond to demands more quickly and efficiently for the University to remain competitive.

All goals in this service category were reviewed by the ITS Administrative and Business Advisory Committee.
Administrative and Business 3-Year Goals

Prepare to move PeopleSoft to a modern, cloud-based system by the end of this decade
Within the next ten years, UAlbany will convert from using the complex PeopleSoft infrastructure installed in the campus data center to a cloud-based (vendor-hosted or vendor-provided systems outside the campus network) system or systems. The move is required because companies are fundamentally changing the way they provide applications.

This move will require significant campus commitment. The current system, utilized by innumerable offices, is highly customized and includes approximately 1,500 integrations with other systems, 2,500 customizations of the product, and 16,000 custom queries. While the University only runs PeopleSoft’s student information system module, the system has been heavily customized to house business functionality beyond the scope of a student information system. Cloud-based systems will not accommodate the type and scope of customizations currently in place.

Over the next three years, the campus needs to capture and define future needs for administrative and business systems and develop a strategy to achieve that long term vision. ITS will coordinate the effort, but considerable time and effort from many offices will be required to achieve this planning goal.

Deliver new business process automation capabilities
Many departments would benefit from and have requested a tool to help automate and/or expedite processing activities. Such a tool would enable offices to collect information from students or customers of that office via a web form and automatically move that information along to the appropriate office or staff through a defined workflow. Common scenarios might involve multiple automatic handoffs of that information in sequence, gathering approvals or spawning related processes along the way. General availability of this capability is essential for departments to digitize or automate business processes and more expeditiously transition from paper-based or other dated collection/submission practices.

In many cases, departments would benefit from a self-serve tool where ITS staffing is not required to take advantage of the available tool. In other more complex cases, automation of a business process may require integration with existing systems in order to pull or store data or may require business process analysis before implementation; such cases might require ITS staffing for the initial implementation.

The goal in this planning period is to define the need, select the tool(s), procure and implement the tool(s), and begin usage within the first 18-24 months.

Begin modernizing the administrative experience for students
Many of the University’s administrative platforms and processes rely on older technologies. Various system and application interfaces that students and parents use can appear dated, but more notable to students expecting immediate turnaround times are the lengthy processing delays. This IT strategic goal has potential to impact several of the University’s strategic goals pertaining to recruitment and retention. ITS will partner with campus offices to examine various aspects of the student administrative experience that will benefit from business process review, automation, and new technologies. High-impact improvements will be identified and addressed during this period, beginning with Financial Aid and Student Accounts.
This goal is resource-intensive from both a technology funding and staffing perspective. ITS will craft and direct positions that are specifically focused on advancing this strategic priority.

Campus safety and security enhancements
The health and safety of the campus community is of paramount importance. The University has called for technological improvements that support this priority:

- Expanding commercial cellular coverage in areas with weak or no signal, including podium basements and tunnels on the uptown campus. Verizon Wireless is expanding its coverage, and we are encouraging other providers to follow suit.
- Dependent on funding approval, ITS will deploy full WiFi coverage in the tunnels on the uptown campus. In addition to commercial cellular expansion, this will make the University network available to the campus community when they traverse the tunnels. At least one network must remain available for communication services (mobile phones, campus safety apps, etc.) to function.
- ITS is working closely with the University Police Department on a variety of safety measures, including continuous review of blue light emergency phones and the addition of Rave Guardian, a modern campus safety app.

Retire/replace all unsupported systems
Reliance on old, unsupported technologies is a poor practice that invites a host of risks and vulnerabilities. The University needs to move away from systems that have already reached end of life as defined by vendors and identify modern, secure replacements. These include the following:

- Degree Audit Reporting System (DARS). ITS is collaborating with the Registrar’s Office, Purchasing, and SUNY System Administration to identify contract options and suitable replacements. An upgrade or replacement plan will be identified in Year 1.
- The Hyland Nolij document imaging system will migrate to an on-premises version of Hyland OnBase. The project is currently underway. In the long term, a SaaS (Software as a Service) solution is desirable and will be explored in the future.
- The system behind the MyUAlbany student and employee portals has reached end of life and needs to be replaced. ITS is working in collaboration with the Office of Communications and Marketing to identify a replacement solution appropriately aligned with UAlbany’s web presence.

Teaching and Learning Services Category
Teaching and Learning is at the heart of the academic mission. This exciting space is always evolving as the University introduces new areas of study, undertakes fresh initiatives, and explores innovative ideas to engage more deeply with students.

All goals in this service category were vetted with the ITS Teaching and Learning Advisory Committee.

Teaching and Learning 3-Year Goals
Enhance the learning experience through a modernized digital learning environment
The University’s contract with Blackboard ends in December 2023. SUNY System Administration now has a contract for Brightspace, a new learning management system (LMS) that is being implemented at institutions across the SUNY system. UAlbany has been involved in discussions about the
implementation to understand current options and make decisions that will best serve our students and faculty. The University is planning for our own implementation of Brightspace managed by ITS, with the following timeframe:

- Fall 2022 – Planning and preparing
- Spring 2023 – Brightspace Pilot
- Summer 2023 – Production (full cut-over to Brightspace from Blackboard)
- December 2023 – Termination of Blackboard contract

ITS is working closely with campus groups to ensure that faculty, student, and staff needs currently addressed by Blackboard will continue to be met, either within the new Brightspace system or via other means.

ITS is implementing Panopto, a video management platform that replaces Ensemble Video. The new system offers the same features as Ensemble and introduces several new ones, including the ability to search inside video quickly and easily, improved video quizzing options, and more engagement opportunities for students. This component of the goal will be completed early in the first year of this planning period.

Deliver tools and technology that support accessibility
Accessibility has long been an area of concern and is an important part of the University’s commitment to an equitable, inclusive environment. Fortunately, this issue has gained traction among vendors of technology tools, who are increasingly building accessibility features into their products. In Year 1, the implementation of Brightspace and Panopto will provide the campus with built-in accessibility tools that significantly enhance the user experience. This will offer ITS opportunities in Years 2 and 3 to review current third-party tools that address these needs and make informed decisions about which products are essential for ensuring appropriate levels of accessibility.

Provide students with access to course software from anywhere with an Internet connection
Making software readily available to students, regardless of physical location, is a critical component of successful teaching and learning strategies in an online world. While today’s technologies make it easy for students to access software from anywhere with an Internet connection, ITS is committed to developing and implementing avenues that provide students with remote access to any course-required software. New campus funding will be required to realize this goal.

Research Services Category
There is tremendous growth in the research arena. In April 2022, President Rodriguez announced the inclusion of $75 million in the state budget for Albany AI, a multifaceted plan to bring government, educational, and industry partners to expand AI supercomputing resources to the forefront of next-generation chip design. Albany AI is part of the broad vision introduced by new Vice President for Research and Economic Development Thenkurussi “Kesh” Kesavadas to leverage computing power to tackle enormous societal challenges, transforming the institution in the process.

There are innumerable facets and opportunities in this groundbreaking work, many of which are in the discovery phase. Exploring the myriad ways technology supports innovation in emerging fields is a practice ITS is intimately familiar with. The organization is committed to supporting the necessary facilities, equipment, knowledge, and expertise to support growth in this exciting area. While there are
many implications for technology bundled in this initiative, considerable discovery must take place before firm commitments and timelines can be established.

**Research 3-Year Goals**

**Build and grow the research environment to support the Albany AI Supercomputing Initiative and expanded, centralized high-performance computing cluster**

The Albany AI initiative represents a tremendous campus-wide commitment. In the very near-term, ITS will continue to expand the general-purpose HPC (High Performance Computing) cluster and expand that to include GPU cluster nodes to accommodate the immediate needs of the research community. Concurrently, is working closely with the Research and Economic Development division to plan for the design, procurement, and implementation of the AI Initiative that will dramatically improve the technology available to the University research community over a longer term. It is also clear that as Albany AI moves forward, additional staff will be needed.

**Leverage the Research Protected Cloud Enclave to address growing compliance needs for HIPAA**

ITS is nearing completion of a pilot project to provide researchers with a NIST (National Institute of Standards and Technology) 800-171 compliant environment. Compliance is defined by meeting a total of 110 controls to secure and protect data. As the pilot transitions to operations, ITS is working on the documentation and details to assist researchers in understanding what is available with this secure enclave. A NIST-compliant environment significantly increases the University’s eligibility for grants and other funding opportunities.

The goal in this planning period is to provide a similar environment and set of controls that would allow researchers to operate within HIPAA requirements. It will be an important aspect of supporting the Albany AI initiative, as well as other research endeavors.

**Expand open-source software offerings in alignment with the AI community**

The higher performance computing (HPC) cluster available to the UAlbany research community includes many open-source applications. As Albany AI grows and becomes infused across the curriculum, software offerings may need to grow with multi-disciplinary demand. As HPC usage rapidly expands and the AI cluster(s) is designed, gaps in the software library will be identified. The existing general-purpose cluster will be used to introduce new applications identified as an early step in the emerging AI program.

**Support the AI Institute initiative for research, teaching, and learning activities**

Current planning for the Albany AI Supercomputing Initiative is focused on building an AI cluster for use across schools and departments and providing access for partner institutions. As the AI Institute grows, it is important to recognize the opportunities for research efforts to be incorporated into teaching and learning activities. ITS will continue working with the Research and Economic Development division to focus on service and support, including staffing and tools, to ease and shorten the on-ramp for faculty and researchers to utilize the new AI cluster(s).

**Information Security Services Category**

The University continues to advance an active information security program for the campus community. Failure to remain vigilant in this critical area would represent an unacceptable level of risk for the University. Successful programs are those that recognize and accept that information security is everyone’s responsibility.
The information security landscape is subject to dramatic changes. Many institutions of higher education, and UAlbany among them, are adopting a “not if, but when” philosophy when it comes to assessing security risks. Industry best practices put measures in place to identify and respond to security breaches as quickly as possible to avoid costly fines and damage to institutional reputation. Goals in this category are a mix of operational measures internal to ITS, along with activities to help the campus prepare and respond to incidents. Both avenues are critical to achieving success in this service area.

**Information Security 3-Year Goals**

**Updating University policies to reflect changes in technology and threats**

As the information security landscape evolves, campus IT security policies require periodic evaluation to assure adequate protection and consider existing technologies. They must also accurately reflect steps IT takes to manage, monitor, and protect the University’s technology resources. Policies may also require adjustments to respond appropriately to threats and risks.

ITS currently has several IT security policies, protocols, and procedures covering a wide range of topics. New policies are needed to better address emerging technologies, such as cloud services, mobile devices, the Internet of Things (IoT), and others. ITS follows the University’s process for developing new policies, which include broad input from campus constituencies. This feedback will assist ITS in identifying specific use cases that may influence policy development.

During Year 1, ITS expects to review all information security policies, protocols, and processes, and identify any that require updates. Once this is complete, ITS will identify and prioritize new policies for development.

**Improving security with advanced tools, including a modern identity management system**

Just as the information security landscape changes, so too do the tools that are used to protect it. ITS must continuously assess the value and overall effectiveness of the applications, systems, and tools in the security program.

ITS will initiate a multi-year project to conduct an environmental scan and select a replacement for the identity management system, Microsoft Identity Manager (MIM), which is reaching end of life. This decision may also impact the University’s choice of multifactor authentication platform. Both tools play a critical role in managing who has access to institutional data. Implementation of the new solution would occur within the next three years, contingent upon campus funding.

**Expanding capabilities to examine security events across all technology platforms**

The ability to evaluate security incidents both in real-time and after-the-fact across multiple systems and platforms is increasingly important. Tools that provide the ability to quickly identify and respond to potential security incidents help reduce the impact of cyberattacks.

ITS currently monitors security using a wide variety of tools. Ideally, this telemetry should be consolidated so all anomalies can be viewed concurrently. Once ITS can examine security events across all platforms, search and alerting capabilities can be expanded. Machine learning and AI are some of the tools that may identify relationships across events. These advancements will enable ITS to identify potential incidents, not just vulnerabilities. The faster ITS can identify events, the less likely an event will become a major incident with significant impact.
While staff limitations are a concern in this area, ITS plans to establish centralized logging within fiscal year 23-24, contingent upon campus funding.

**Developing and testing campus-wide plans for cyberattacks**
While a variety of emergencies have the potential to disrupt technology, cyberattacks are an increasingly likely threat to the University. ITS is working with the Office of Emergency Management and other key campus groups to establish a playbook for how the campus will respond in the event all IT systems are inaccessible or unavailable.

**Strengthening IT disaster recovery to support campus business continuity efforts**
It is important for the campus community to understand the role of technology in disaster recovery and business continuity efforts. In the event of ransomware or an attack that disrupts access to campus IT services, ITS will be engaged in restoring systems and technology services. Depending on the complexity, offices may not have access to any of the resources or information they are accustomed to using for some period of time. It is critical that divisions and departments give careful thought to communication, information sharing, and how any operational activities will be performed if the technology supporting those activities is unavailable. The goal in this planning period is to clearly articulate the current level of IT disaster recovery maturity to identify areas for attention and inform campus business continuity planning.

**Infrastructure Services Category**
The University network and infrastructure are the backbone of the campus. Every department relies on enterprise technologies, with many depending on specific platforms and applications unique to their area. This is true not only across the campus, but also in ITS, where staff with infrastructure responsibilities balance several activities, including membership across a variety of service teams. High profile initiatives, such as Albany AI, have tremendous implications for IT infrastructure. Although it is premature to identify specific goals, considerable time and attention will be needed when this comes to fruition and will require a commitment to additional staffing. It is also an area where ITS has critical vacancies and is struggling to attract and recruit suitable candidates.

Given these competing factors, it is imperative that ITS make wise decisions about deploying its limited human resources and set realistic expectations for what can be achieved in specific timeframes. It is also important to recognize that infrastructure projects often represent critical dependencies for future campus-driven projects. While this may not always be readily apparent, innocuous technical projects may be precursors to high-priority projects for campus partners. Infrastructure is far-reaching, and it is vital to recognize the technical complexities involved in helping the University to achieve its goals.

**Infrastructure 3-Year Goals**
**Continued growth and improvement to the University wired and wireless networks**
Reliance on the University network is exponential and keeping up with demand is a significant undertaking. Capacity enhancements are critical to keep up with the increasing density of devices across campuses. Demand for continuous expansion of WiFi coverage is ever-present from students, faculty, and staff. The reach of the network will continue to grow during this period as a strong connection between the University Data Center and the former Albany High School is implemented to support the future needs of CEAS (College of Engineering and Applied Sciences) occupants.
Implement off-site, cloud-based backup and storage
ITS currently has multiple copies of all University data stored on-site on the campus network. ITS will complete the implementation of off-site, cloud-based backup and storage in FY 22-23. Protecting a copy of all enterprise data in a cloud-based system outside the University network is a crucial preparatory step in recovering from ransomware attacks.

Improve cloud readiness and capability
Increasingly, ITS needs to expand its ability to develop and design solutions incorporating cloud infrastructure. Such activities support initiatives beyond Infrastructure services, such as remote access to software and desktop environments, AI infrastructure scaling, and the HIPAA secure computing enclave, all which supplement teaching, learning, and research activities. As this is another area in need of additional staff, specific projects and timelines will rely on key positions being filled.

Advance integration and low-code development platforms in preparation for PeopleSoft migration
The university needs to adopt modern technologies to manage the way data is shared across enterprise systems, including the student information system, the digital learning environment, and many other systems. The first step is to implement MuleSoft, an infrastructure application providing a modern, low-code method for passing and accessing data. The platform enables real-time integration, which allows data to be integrated quickly and reduces the need for ITS to write and maintain custom code for this purpose. This is a crucial precursor in the PeopleSoft migration to a cloud-based environment where the use of modern technologies is expected. Once MuleSoft is in place, ITS will use it to address all new integrations, no longer using legacy methods. Additionally, a plan for converting the 1500 customized PeopleSoft integrations will be developed during this period.

The second step in this goal is to procure and implement a low-code development platform. This will provide the campus with opportunities to work with data outside of the PeopleSoft environment, enabling ITS to build modern apps/solutions more quickly. This sets the stage for making much-needed improvements to business process workflows for many campus partners faster than ever before.

Desktop and Mobile Computing Service Category
Managing University-owned computers can be a challenge with respect to consistency, security, licensing, inventory, life cycle planning, and budgeting. From a campus perspective, this can be even more challenging in schools or departments where desktop support is not centrally managed. ITS is working diligently to streamline these processes for the campus community. ITS has initiated two projects to implement applications on Windows-based machines (AllSight) and macs (Jamf) that will provide information on the current state of university-owned equipment, which will advance several of the goals in this service area, thereby improving the user experience.

Desktop and Mobile Computing 3-Year Goals
Provide a consistent user experience and improve security on university-owned devices
Standardizing the device experience is challenging for ITS, as the purchase and support of equipment is a responsibility that cuts across divisions and departments. Increasingly, security concerns and disparities in the customer experience warrant a more centralized approach to desktop and mobile device support. Ensuring that equipment is properly patched, supported and updated provides a level of consistency and security that is important for all members of the campus community.
As mentioned above, ITS is engaged in two projects that will yield many improvements. In Year 1, the AllSight and Jamf management applications will be fully examined for the most effective ways to secure and manage devices while providing a more consistent desktop experience across ITS-managed devices. In Years 2 and 3, ITS will initiate projects to implement both applications and expand device management capabilities to apply across broader groups of machines (i.e., classroom, conference rooms, faculty/staff office computers) and streamline processes to deploy patches and updates with minimal disruptions.

Improve application distribution and licensing to ensure appropriate use and maximize efficiencies in spending

ITS is integrating remote tools to effectively manage and secure University-owned computers. This practice streamlines efficiencies by reducing the need for ITS staff to physically touch equipment. These tools also improve the processes by which software licenses and applications are distributed to the campus community.

AllSight and Jamf contribute to this goal by providing a wealth of information about machines on the university network, including what software is installed. Over time, this information can be used to develop a clear picture of licensing needs across the campus, including what software is used by each department. This will assist in identifying areas where campus-wide licensing would yield broader access and significant cost savings. This information can be used to promote compliance, propagate computing standards, and identify efficiencies to enhance and secure the University’s electronic assets.

Develop campus-wide hardware lifecycle services including equipment standards, centralized inventory, and strategic spending

Consistent with the need for standardization, the University would benefit greatly from campus-wide hardware lifecycle planning and budgeting. ITS estimates that a standard for desktop computing hardware would meet the needs of ~85% of faculty/staff, with the remaining ~15% requiring specialized configurations. In Year 1, ITS will inventory all University-owned Windows and mac workstations. The inventory will be maintained and used to make informed decisions about appropriate standards and life expectancy for all campus devices. This will position ITS to speak directly to the current state of university-owned computing equipment and propose a sustainable improvement plan over time.

Communication and Collaboration Services Category

ITS saw a significant uptick in the utilization of Communication and Collaboration Services during the COVID-19 pandemic. Tools that enabled online meetings, document sharing, and other activities that enhanced interaction were quickly adopted by the campus community. Remote options demonstrated efficiencies and other benefits that now represent lasting changes to the campus culture. ITS will capitalize on the progress made during the pandemic to further promote and utilize a common, secure set of tools across the campus community. Using common tools is an important first step in establishing a standard for the campus. Standards are an important part of creating a shared, common experience for all members of the campus community.
Communication and Collaboration 3-Year Goals

Promote the use of modern collaboration and conferencing tools to improve the user experience and increase work efficacy

Increasingly, the University is moving to cloud-based, flexible tools. As an example, Microsoft Office 365, the popular Microsoft Office suite, has evolved to include a host of storage and collaboration tools that replace older, on-premises solutions. ITS is evaluating and enabling many of these features in Year 1 to position the campus for more efficient, effective integration and collaboration in Years 2-3.

Advance towards next generation phone technology

ITS is actively exploring modern, cloud-first options for telephone-based services in campus call centers and the University operator. The next iteration in telephone technology is the elimination of desk phones in favor of computer-based solutions, such as Jabber or Teams. The University’s Cisco contract ends in Year 3. In anticipation of this, ITS will explore various telephony options in Year 2. Internet-based solutions offer greater efficiency and better pricing, as they will eventually reduce or eliminate the need for phone servers housed in the University Data center. Over time, these will represent significant cost savings for the campus.

Expand campus cellular coverage

ITS is currently working with Verizon to expand cellular coverage in areas where access is limited. While Verizon is the only carrier exploring cellular improvements on campus at this time, ITS expects that additional carriers will follow their example as this technology evolves. WiFi calling is also becoming more dependable as we expand WiFi coverage across the campuses, which will provide members of the campus community with additional calling options.

ITS Organizational Goals

Improve recruitment and grow the IT workforce to meet evolving technology needs and increase diversity

ITS is continually evaluating workforce needs. The COVID-19 pandemic had a significant, long-term impact on staffing, especially in the technology field. Work from home has altered employee expectations, retirements have increased nationwide, inflation is causing additional salary pressures, and skilled IT staff are in high demand. The University has long enjoyed a reputation for providing a safe, stable environment and low turnover among staff. While many employers cannot offer the same level of job security available at UAlbany, they are often able to attract high-performing individuals with bigger salaries, greater flexibility, and other performance-based benefits.

Many ITS vacancies are due to retirements, and the departure of long-term employees offers opportunities to evaluate job responsibilities and skillsets, ensuring that new hires have the right mix of talents to meet current and future IT needs. New strategies are needed to improve recruitment efforts and attract qualified, experienced candidates. ITS is working closely, both internally and with campus partners, to ensure that new positions are aligned with campus needs and initiatives. Finally, any new position creates an opportunity to improve diversity within the department.

In Year 1, ITS will continue efforts to refine job descriptions that attract a broad, diverse pool of candidates to fill current vacancies. As many of the initiatives described above indicate additional
staffing needs, Years 2-3 will reflect progress on evolving staffing needs and additional improvements to the recruitment process.

Conclusion
To be successful, technology cannot operate in a vacuum. Just as the campus relies on technology to accomplish many of their strategic goals and objectives, ITS needs input from across the campus to ensure that time and funding are invested appropriately, and services are on point. Working together is always the best path forward.

ITS thanks the members of its Advisory Committees and all campus partners for their time, attention, and candor. We gratefully acknowledge the contributions of all ITS staff and recognize their dedication and commitment as the backbone of our success.
## Appendices

### Appendix 1: ITS Advisory Committee Membership

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<th>Administrative and Business</th>
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<th>Finance &amp; Administration</th>
<th>Information Security</th>
<th>Management</th>
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<td>Baumes, Mary (ex-officio)</td>
<td>Project Portfolio Manager</td>
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<td>ITS</td>
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<td>Champagne, Jane</td>
<td>Director of Graduate Admissions</td>
<td>Academic Affairs</td>
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<td>Johannesen, Christine (chair)</td>
<td>Director of Academic, Administrative, and Research Services</td>
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**Teaching and Learning**

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