SAINT AUGUSTINE'S UNIVERSITY

INFORMATION TECHNOLOGY STRATEGIC PLAN

ABOUT US

INFORMATION TECHNOLOGY SERVICES (ITS) PROVIDES CUSTOMER-FOCUSED TECHNOLOGICAL SUPPORT, RESOURCES, AND INNOVATIVE SOLUTIONS IN ALIGNMENT WITH ACADEMIC, RESEARCH, AND ADMINISTRATIVE GOALS. OUR SYSTEMS SERVE A WIDE RANGE OF POPULATIONS CONDUCTING BUSINESS WITH THE UNIVERSITY, SUCH AS CURRENT AND PROSPECTIVE STUDENTS, FACULTY, STAFF, VENDORS, AND OTHER UNIVERSITY PARTNERS. OUR DEPARTMENT OVERSEES THE ENTIRE UNIVERSITY PROVIDING A MULTITUDE OF SERVICES INCLUDING WI-FI, HARDWARE, SOFTWARE, PHONE SYSTEMS, AND A WIDE ARRAY OF INSTRUCTIONAL, ACADEMIC, AND ADMINISTRATIVE TECHNOLOGY RESOURCES AND SYSTEMS USED ACROSS THE UNIVERSITY.

BY EFFECTIVELY COMMUNICATING WITH THE CAMPUS COMMUNITY, WE ARE REGAINING OUR CREDIBILITY TO SERVE. WHILE KEEPING THE STUDENT'S SUCCESS OUR CORE GOAL, WE HAVE CONSTRUCTED SOME CONCEPTS AND IDEOLOGIES TO GUIDE OUR DEPARTMENT. THIS STRATEGIC GOAL NOT ONLY CONCENTRATES ON COMPREHENSIVE SCHEMAS, BUT THE KEY COMPONENTS WHICH HIGHLIGHTS THE DIRECTION OF OUR VISION TO RECONNECT WITH INSTITUTIONAL NEEDS. BY CONCENTRATING ON COMMUNICATION, INFRASTRUCTURE, INNOVATION, SECURITY, RESPONSIVE & KNOWLEDGE SUPPORT, AND TEACHING & LEARNING WE SUPPORT THE "RE-IMAGINE" CAMPAIGN AND UPHOLD OUR COMMITMENT TO STUDENT SUCCESS AND SUSTAINABILITY.

OUR VISION

MISSION STATEMENT

SAINT AUGUSTINE'S UNIVERSITY IS DEVOTED TO SUSTAIN A LEARNING COMMUNITY IN WHICH STUDENTS CAN PREPARE TO EXCEL BOTH ACADEMICALLY AND SOCIALLY. FURTHERMORE, THE UNIVERSITY FOCUSES ON LEADING BY EXAMPLE AND CREATES "SPIRIT" WITHIN EACH INDIVIDUAL AT THE INSTITUTION. BY MERGING OUR DEEP HISTORY WITH FUTURE TECHNOLOGY, WE ARE COMMITTED TO EXCELLENCE, SUCCESS, & SUSTAINABILITY. WE STRIVE TO ALWAYS STAY CONNECTED WITH THE CAMPUS COMMUNITY TO SOLVE PROBLEMS IN HOPES THAT TECHNOLOGICAL DEVELOPMENT WILL BE THE CENTER OF THE UNIVERSITY'S TRANSACTIONS.

EXECUTIVE SUMMARY

SAINT AUGUSTINE'S UNIVERSITY PROGRESSIVE TECHNOLOGICAL ATMOSPHERE IS STRATEGICALLY IMPORTANT TO ITS ACADEMIC MISSION SINCE INFORMATION TECHNOLOGY IS AN ESSENTIAL PRESENCE AND FUNDAMENTAL FACILITATOR OF GLOBAL AND RENOWNED RESEARCH, EDUCATIONAL PRACTICES, AND THE CENTRAL OPERATIONS OF BOTH OUR CAMPUS AND IMMEDIATE OUTSIDE COMMUNITIES.

IN THIS DEVELOPMENT EFFORT, THE INFORMATION TECHNOLOGY AND SERVICES DEPARTMENT HAS BEEN SCOPING AND ASSESSING THE SUSTAINABILITY OF CURRENT STATE TECHNOLOGY ENVIRONMENT. THE GUIDING PRINCIPLES AND THEMES ARE CENTERED AROUND 6 FACTORS WHICH SUPPORT SAU'S VISION, MISSION, AND STRATEGIC PRIORITIES: COMMUNICATION, INFRASTRUCTURE, SECURITY, INNOVATION, RESPONSIVE AND KNOWLEDGE SUPPORT, AND TEACHING & LEARNING. BASED ON THE EXAMINATION OF OUR CURRENT ENVIRONMENT COMMENCED BY THE INTERNAL IT TEAM AND MANAGED SERVICES VENDOR, THE GOALS ARE OUTLINED IN THE 2022-2025 SAU UNIVERSITY STRATEGIC PLAN, WE HAVE IDENTIFIED THREE KEY GOALS FOR THIS NEW IT DEVELOPMENT PHASE:

GOAL 1: AID STUDENTS & FACULTY TO USE TECHNOLOGY MORE EFFECTIVELY

GOAL 2: PROVIDE PERVASIVE, SECURE SYSTEMS & SERVICES

GOAL 3: SUPPORT INNOVATION IN RESEARCH, LEARNING, AND EDUCATION
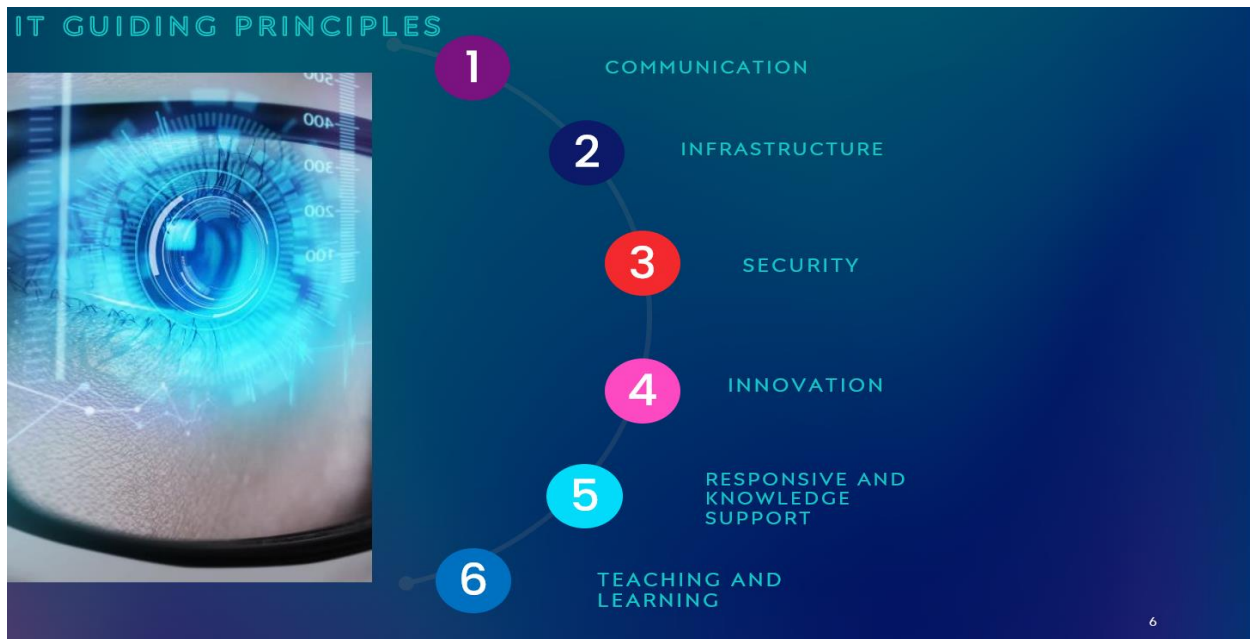
1. Communication

Here, at Saint Augustine's University, we want to ensure that IT Services discloses its policies and procedures to all stakeholders, students, faculty and staff. By being part of any implementation during its inception phase, we can strengthen our development and conceptualization strategies. This will lead and provide a more consistent, accurate, well-coordinated execution method. More importantly, a timely and responsive approach in serving our core audience. Moreover, conveying clear communication allows us to directly provide warranted training through coaching, exclusive learning activities, and the respective resources that will meet the unique needs and expectations of all learners.

2. Infrastructure

The IT infrastructure at SAU is the foundation and backbone of all technology services. Our goal is to re-invent, rebuild, and maintain a secure, cogent, state-of-the-art but also industrious information technology infrastructure. This includes (but not limited to) networks, hardware, software, security, facilities, and other emerging innovative technologies. Information Technology Services wants to guarantee the high-quality performance of the department by providing effective, reliable, reputable, and viable services to all students, faculty, and staff throughout the organization which includes remote university constituents.

3. Innovation

SAU values the pursuit of technological innovation and sustainability. While keeping a constant eye to the future, IT supports the University's mission by stimulating, developing, and recommending imaginative but improved transformative technologies.

4. Security

Protecting data integrity and security are foundational elements of a secure technology platform. While the focus will be on a student-centered delivery of services, SAU's IT department will make any effort to provide a reliable and secure service to all members of campus community. It is deemed critical to provide all users a comprehensive range of resources, trainings, and services to build their awareness and capacity to follow security policies and procedures effectively.

5. Responsive and Knowledge Support

Zeroing in on a robust customer service model and providing excellent customer service to all users of technology at SAU is our main objective. With aligning IT with a true customer experience, we work not only to be proactive but to provide resources, User Acceptance Training, and instruction to help our end client (users) use different technologies in their unique environments.

6. Teaching and Learning

SAU's IT Department wants to stay committed in knowing our benefactors' needs so we can diligently execute our mission and vision. Our collective vision is to provide leadership and guidance to the campus in technology implementation and endeavors. Utilizing IT to effectively enhance learning, teaching, research, and even administrative outcomes will help to empower students to achieve academic success by ensuring the infrastructure and appropriate software are available to support the variety of learning opportunities available to students in a digital learning environment.

GOAL 1: AID STUDENTS, FACULTY & STAFF TO USE TECHNOLOGY MORE EFFECTIVELY

A surplus of IT systems and services already permeate SAU's educational, research, and administrative activities on a day-to-day basis. IT operates many of these services directly; however, others are operated by our external partners over which we have varying degrees of control. Also, we acknowledge that other services are identified and engaged directly by the campus community members we serve with no involvement from or notice to our various information technology support organizations. Classrooms and other learning spaces are equipped with a diverse range of devices including smart boards, interactive panels, and state-of-the-are computers which include respective software for knowledge enhancement. Despite the complexity of our ecosystem, end users expect a continuous experience as we adopt new services and transition between new innovative systems and devices. By allowing our content and services fully accessible and readily useable to all stakeholders within the university, we notice that a vast change in infrastructure will trigger differing concerns as it relates to the useability of new technology. This concept is challenging for all institutions, but SAU is capitalizing on this opportunity to train, teach, and govern policies. Of course, these new advancements will expose SAU and all stakeholders to incessant information security threats to both institutional and personal data; nonetheless, the countermeasures we have deployed to mitigate any threats frequently run counter to enabling a much more smooth and coherent user experience. To mitigate any concerns, we must accept the posture of minimizing the inconvenience of necessary security measures throughout all the services we render, while also instructing our institution constituents about why such measures taking place.

S O L U T I O N S: Y E A R 1

1) <u>Enhance User Interface Design and User Experience</u>

i. *Establish, communicate, and maintain UI/UX standards to promote a common, intuitive experience for all official SAU systems and services*

ii. *Improve the overall user interfaces and user experiences of all IT systems and services with particular attention to our older systems*

iii. *Improve integration of services so users can move between related systems without distraction or complication*

iv. *Establish modern "responsive design" approaches across all web products so that web or other computer applications automatically adapt their interfaces to accommodate the size and capabilities of the device being used*

2) <u>Develop Back-End Integration of Tools and Systems</u>

i. *Use modern APIs from all newly developed or acquired systems*

ii. *Develop a comprehensive catalogue of institutional IT services and data resources*

iii. *Establish data governance plans for all shareable institutional data*

3) <u>Web Support Improvement</u>

i. *Identify and establish a base level of web "entitlement" services that units can depend on to provide functional, effective, secure, and maintainable web presences*

ii. *Develop a tiered set of mobile application development services to help meet the needs of unit mobile development efforts*

4) **Increase Use and Support of Collaborative Tools**

i. *Provide enhanced local support in the schools and departments around video production, motion/animation/visualization, coding and course design including course "trailers"*

ii. *Increase the availability and capacity of technology options to support online learning, including supporting open-ended experiments to help faculty explore new possibilities*

iii. *Promote more effective uses of existing tools and services*

iv. *Promote faculty and staff investigations into new and emerging IT tools and services*

5) **Expansion of Technology in Learning and Meeting Spaces**

i. *Establish media standards capable of supporting modern classroom and meeting space uses*

ii. *Increase funding to accelerate classroom and meeting space renovations and technology upgrades*

iii. *Establish technology assessment fee to modernize and improve the systems that support academic services for both traditional on-campus students and for online students*

6) **Provide Accessible Versions of Digital Content**

i. *Establish tools and services to support the automatic and economical generation of accessible digital content in multiple formats*

GOAL 2: PROVIDE PERVASIVE, SECURE SYSTEMS AND SERVICES

The sustainability of our network is critical. It is evolving significantly over the operational semesters. Generally, our infrastructure has been keeping up with ever-increasing demands, despite the increasingly hostile external environment. SAU has incorporated experimentation with evolving network technologies to keep high capability network services such as hosted VoIP and IaaS. Keeping our network capacities ahead of the demands of our users remains a formidable task, especially in view of the increasing security precautions. To be considered a customer focused and driven department, our campus networking over the next planning horizon will require attentiveness and progress.

SOLUTIONS: YEAR 2

1) Maintain A Modern Protected Network

i. *Increase the Bandwidth of Our Wired Network*
   a. Increased wired network bandwidth will be needed, but not in all places at the same time and improved network monitoring tools will enable us to enhance the capacities of individual circuits in an economical way before they become overloaded.

ii. *Monitor and Replace Old Fiber*
   a. Our original campus fiber optic network is approaching 30 years of age. We will see an increasing need to replace aging fiber and the conduits that house it.

iii. *Extend Campus Fiber*

   a. Research networking, outdoor Wi-Fi, and/or physical security connectivity.

iv. *Improve Campus Wi-Fi and Cellular Coverage*

   a. Though wired network connections are essential for our IT infrastructure, most of our users rely on their wireless connections (both Wi-Fi and cellular) for routine interactions with our systems and the wider Internet. Our campus Wi-Fi environment faces coverage challenges in many areas of campus; recent changes in Wi-Fi technology improve the bandwidth a well-connected user device can consume, but the radio signals needed by these systems do not penetrate the thick walls of many SAU buildings. We have already started the heat maps to validate that we can restore excellent Wi-Fi coverage across campus.

v. *Improve Data Management and Data Transfer Options for Researchers*

   a. Over the past several years we have seen a rapidly developing increase in the need for research-based data storage across the academic disciplines. This

trend requires that we establish support and policy structures to help us better meet our institutional data storage and preservation requirements and to address support for agency-mandated data access beyond active phases of research projects. We were able to establish a new ERP System which has geared the Institution Research division.

vi. *Improve Network Management, Reporting, and Resolutions*

    a. Our network is a very complex piece of engineering, with a large number of interactions and interdependencies among all of its parts, encompassing not only traditional networking equipment but now also security devices, load balancing units, network management systems. Our efforts are further complicated by the networks' constant and necessary evolution. SAU is dedicated to make good progress in future years by increasing the degree of automation by monitoring and diagnosing network performance. However, this remains an active area of concern requiring additional effort in the coming years.

2) <u>Respond To and Anticipate Evolving Information Security Treats</u>

i. *Establish processes to ensure compliance across all systems and services in the face of ever-increasing regulations*
ii. *Enhance security awareness/education for all users for both their own personal information, and especially for their handling SAU's sensitive data, when relevant*

3) <u>Better Integrate Our IT Purchasing Processes With The Needs of Our Users</u>

i. *SAU has had challenges in communicating about the various technology purchasing options that are available to faculty and staff. By improving communication, we can enable faculty and others to make more cost-effective and secure decisions when making IT expenditures.*
ii. *Improve the process by which it responds to requests for support and consultation by staff from other campus IT units.*

    a. Implementation will involve better coordination between support units and a refocusing of existing staff efforts**.**

GOAL 3: SUPPORT INNOVATION, RESEARCH, & EDUCATION

SAU is creating a strong ecosystem to encourage innovation with emerging technologies both within and beyond the formal curriculum. Endeavors such as eGaming/eSports, Apple robotics, hosted VoIP, virtual reality, and other enhanced lab contributions will give us valuable experience in supporting students and others in experimenting with new and emerging technologies. We are currently working to better comprehend how we can support innovation and experiment at the same time. As we continue to develop strong relationships with our vendor partners and become more acquainted with their services and products, we will continue to be flexible and agile in our approach to support the expanding use of technology. SAU has trailed behind peer institutions in fully leveraging the extensive quantities of data that can now be captured by IT and Institutional Research. New systems and ideologies such as the implementation of ERP software provides potential in helping us to improve the overall SAU experience and increase productivities across our internal and external ecosystems. We are working to posture SAU as a leader in advocating innovation and incorporating appropriate uses of emergent technologies and collected data.

SOLUTIONS: YEAR 3

1) Improve SAU's proficiency in data analytics related to institutional research and data

i.   *Develop ways that we can better leverage the use of captured institutional data to further improve educational outcomes and computational research workflows.*

ii. *Provide convenient extracurricular education and training opportunities for SAU community members so that they may improve their levels of data science literacy.*

2) Advance Both Curricular and Extracurricular Opportunities for IT Education

i.   *Improve IT training opportunities around the use of advanced SAU deployed IT tools and services.*

ii. *Improve co-curricular educational opportunities around emerging topics and key practices in information technology and data analytics.*

3) Support and Promote IT Innovation

i. *Enhance opportunities and support for early access and experimentation with emerging technologies.*

Saint Augustine's University has done much to begin supporting early community access and experimentation with new and emerging technologies. Through strategic collaborations with several of our key corporate partners (Apple, Cisco, Microsoft, Lenovo, etc.) Our Co-Lab, lab computing, and research computing support programs provide the students with opportunities for open and early access to the most current computational tools, techniques and capabilities courses/seminars, eSports lab, advanced media labs, virtual/augmented reality, etc.

ii. *Leverage consumer technologies and open source where possible.*

The mass market has driven the cost of highly capable electronic devices down to remarkably low levels. We can create real value for our community while saving time and money by leveraging new consumer technologies where possible rather than developing our own solutions or purchasing low-volume proprietary hardware.

iii. *Prepare for the "Internet of Things"*

The "Internet of Things" is a development of the Internet in which everyday objects have network connectivity, allowing them to send and receive data. It describes what is today a real trend towards embedding intelligence, sensors, and wireless connectivity into previously inert objects. As SAU ventures to become a "smart campus" we predict that the number of such devices will grow tremendously, and we may soon see such devices per active social network user as common consumer products begin to incorporate this potentially disruptive technology. IT provides great opportunities for innovation and progress across all aspects of campus life. In theory, it raises a number of security-related challenges. SAU should engage in advanced planning around the expected appearance of many thousands devices on our networks within the next several years.

CONCLUSION

Saint Augustine's University, is an educational institution with global interests, places ever-increasing demands on the technological environment that is so important to its competitiveness and overall success. As evidenced in this report, the willingness of our community members to come together and participate in a deep and thorough discussion of our IT environment's strategic strengths, weaknesses, opportunities, and threats is in itself evidence of our community's excellent capacity to work together toward a set of common goals. This planning process will allow participants from across the campus to engage with one another and reach a common understanding of SAU's technological goals and the strategic actions required to attain those goals.

RE-IMAGINE, RECONNECT, REINVEST