

The Digital Campus technology for an enhanced Tomorrow

Oswego State Draft Information Technology Strategic Plan November 17, 2015



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What is The Digital Campus? Through our extensive planning process, we have asked that question to over 200 community members of SUNY Oswego. Throughout this document, we have summarized responses into a narrative. Some of the answers told us that The Digital Campus consists of

- seamless anytime, anywhere access
- systems that are intuitive to use
- a highly skilled workforce that utilizes technology
- easy, secure access to data to support decision making and initiatives
- technology that is utilized in new and innovative ways.
- access to the services essential to thrive and succeed

"The Digital Campus - technology for an enhanced Tomorrow" is intended to be a campus Information Technology strategic plan which moves us towards the vision that the community has voiced. The plan is intended to tightly align with the strategic priorities outlined in the College's *Tomorrow - Greater Impact and Success* plan.

This is the second IT strategic plan for the College. The first plan achieved a more stable and robust infrastructure including enhanced wireless and internet access, improved classroom spaces, increased access to technology for students in the classroom and enhanced administrative systems and processes. It is the intent of this plan to continue to build on these successes and utilize technology in new and innovative ways.

It is recognized there is a need to build nimbleness and agility into the plan to support the ever changing state of technology and the dynamic needs of our students. We are confident we are meeting the needs of our current students, but we need to continue to innovate for the student of the future. This future includes staying true to our role as a residential college as well as prepare our students for the lifelong learning they will require.

Collaboration and communication are key to all technology initiatives. Planning, projects and service delivery need to be done as partnerships with stakeholders and Campus Technology Services (CTS) contributing equally to deliver value to our community. Oswego has a great history of student centeredness to bring focus to the work required to reach the goals as outlined in this plan.

The plan is intended to address the needs of all stakeholders. This includes not only the faculty, staff and students on campus, but also those with distance and satellite locations. It also

recognizes our need to provide service to other constituencies, such as our alumni, and the broader community of Oswego, SUNY and Central New York.

The plan is intended to be a guide, with annual review and assessment. We need to stay true to the priorities of the institution and utilize technology to move us as efficiently as possible.

Finally, the plan is comprehensive and an effective tool to guide decision making to help us build the digital campus that enables our community to thrive and meet the grand challenges of our time.

College and SUNY Context

With the release of the College's strategic plan *Tomorrow - Greater Impact and Success*, Oswego has reaffirmed its mission and vision and identified five impacts that lay the foundation for what our work eventually means.

The *Tomorrow* plan is aligned with the SUNY Excels plan which addresses success by working together—and channeling systemness. The goals of the Digital Campus directly address the priorities and will play a role in Oswego achieving the goals outlined in SUNY Excels.

Mission

Our mission is to contribute to the common good by lighting the path to wisdom and empowering women and men to pursue meaningful lives as productive, responsible citizens.

Vision

Inspired by a shared commitment to excellence and the desire to transcend traditional higher-education boundaries, SUNY Oswego will be a premier institution that provides a transformative experience to a diverse body of students, empowering them to live ethical and meaningful lives and build a better world.

Impacts

- 1. Our students and graduates thrive & succeed
- 2. Our education ecosystem is highly collaborative and engaged
- 3. Our communities and partnerships are enriched and supported
- 4. Our institution is highly effective and sustainable.
- 5. Our faculty, staff and students move the dial on grand challenges of our time.

The *Tomorrow* plan introduces Performance Drivers, Key Indicators and Impacts that will drive the institution forward. It is recognized that technology will be a tool in support of both achieving success with many of the drivers identified in the plan, and in assessing the success of the plan.

As Oswego's focus moves to becoming a data-driven decision-making campus, the campus will require systems that provide analysis for timely decision making.

The *Tomorrow* plan clearly identifies priorities that will help SUNY Oswego continue to thrive as a residential campus and to operate in the evolving enterprise of higher education. This presents Oswego — as well as all of the education sector— with a bold opportunity to move people from prospects to learners to professionals to advocates (all deeply connected to the college digitally). New business models for Higher Education are being explored on our campus, which will require new ways of thinking in the systems we develop and implement.

A focus of the *Tomorrow* plan is to enhance the College's impact in our broader community. This includes the physical presence of our branch campus in SUNY Oswego's Metro Center and other satellite locations, and the virtual extension through the expansion of our programs in Open SUNY. The Digital Campus will support these ambitions by ensuring the technology and infrastructure in these locations support the planned programs and outcomes.

IT context

We are living in a time of great technical change. Mobile, social, the cloud and an abundance of data and information are changing the way our community interacts with the environment around us.

Technology is changing people's experience and their expectations. There is constant pressure on IT organizations to offer a "Starbucks experience" and deliver services "as good as Google". This means: 24/7 seamless access, responsive, robust systems that are intuitive to use and personal in interaction.

Technology is embedded in every aspect of the College.

- Students are bringing more devices than ever before to connect to the network.
- Faculty are adopting mobile devices and tablets into their classroom.
- Students expect an "at home" experience in their residence.
- New niche applications in the cloud are helping streamline administrative tasks to help faculty, staff and students be more productive.
- Digital materials are used increasingly in the classroom.
- Instructional technology is providing constructs that are engaging students in rich and meaningful online and classroom experiences.
- There is increased need to manage and secure data, convert it into information, and use it for effective decision-making, problem solving and opportunities.

As a result of these increasing demands, CTS must deliver service at a faster pace than in years past. The *Tomorrow* plan is an evolving document; agility and nimbleness will be required

to deliver the services and projects required for the College to achieve the expected impact. Many of the projects require a new way of thinking to deliver systems, services and projects in this digital landscape. As IT professionals, we must examine the role technology will take, and collaborate and adapt with stakeholders to ensure the achievement of clearly stated strategic outcomes.

Feedback indicates that CTS is a strong organization that can build on successes from the past. Talented staff and a strong infrastructure leave the College in a position to collaborate with others across the college to achieve more. It is clear that IT touches all operations at the college. And, the dependence on technology is only going to increase in the years' ahead as every department and unit on campus is becoming more integrated in the use of technology.

Goals

- 1. Students, faculty and staff thrive by seamlessly integrating technology into their teaching, learning and scholarly activities.
- 2. Our community is efficient and creates value with our technical resources.
- 3. Service excellence provides efficient support through robust, green and secure infrastructure and processes.
- 4. Effective IT planning and governance ensure campus priorities are achieved.

Goal 1 - Students, faculty and staff succeed by seamlessly integrating technology into their teaching, learning and research

The digitally enhanced campus is a community that implements technology, embraces change, thinks of the future and the next generation, and strives to make our campus, programs, and students successful. It provides every student with the tools they need to ensure a successful academic tenure, moving from acceptance to graduation in a timely manner.

Objective 1 - Provide a digitally rich ecosystem that respects the affordability of education and encourages access to technology *Initiatives*

- i. Seamless network access for our entire community
- ii. Well managed technology lifecycle replacements for faculty and staff in the laboratory, office and the classroom to support teaching, research and creative activities
- iii. Well managed technology lifecycle for lab spaces that supports learning and research objectives and compliments the technology they own
- iv. Support implementation of new technologies including mobile to support teaching, learning, knowledge creation and consumption

Objective 2 - Position faculty and students for success by addressing access and affordability of teaching and learning resources. *Initiatives*

- i. Projects that introduce new technology to reduce the cost of education and support new learning methodologies
- ii. Develop processes to support digital content (Etexts/econtent/Open Educational Resources) in the classroom that reduces the cost of education
- iii. Provide students with access to software and technology that will position them to succeed in the workplace or graduate/professional school

- iv. Support innovation by continuing to provide opportunities for departments to gain access to necessary hardware and software through competitive processes such as Technology Innovation Program (TIP) grants
- v. Enhance and increase the use of lecture capture to ensure students have easy access to classroom materials
- vi. Provide technology that supports innovative and adaptive experiences
- vii. Communicate with students, faculty and staff the technological resources available to them

Goal 2 - Our community is service oriented, efficient and creates value with our technical resources

The digitally enhanced campus communicates and delivers information seamlessly and efficiently. It allows faculty, staff, and administration to focus on their teaching, scholarship and work. It provides the necessary data and information to support timely decision-making.

A digitally enhanced campus is service oriented, has efficient processes and personnel who are adept practitioners of their craft, are partners with the community in enabling their success, communicate well, and deliver results.

Objective 1 - Support student success by leveraging technology to enable data-driven decision making

Initiatives

- i. Examine and implement technologies that assist with student success focusing on retention and completion
- ii. Examine and implement technologies that assist in the implementation and measurement of the *Tomorrow* plan
- iii. Examine and implement a Client Relationship Management system that assists with managing relationships from prospect to alumni and our external partners

Objective 2 - Support new digital business models by ensuring systems and processes are agile

Initiatives

- i. Develop processes and procedures to support departmental implementation of cloud technologies
- ii. Implement new digital workflows that eliminate paper, reduce cycle times and provide efficient and secure information exchange

Objective 3 - Ensure core administrative systems enable enhanced service to our communities

Initiatives

- i. Develop a plan to implement Banner XE and other supporting administrative applications that ensures Oswego remains at the leading edge of student service delivery
- ii. Develop systems and processes that provide relevant information through the web that also supports mobile and social platforms to our stakeholders
- iii. Enhance our administration and information systems to provide an individualized and personal experience on web and mobile platforms

Goal 3 - Service excellence provides efficient support through robust, green and secure infrastructure and user-friendly processes

A digitally enhanced campus is a home to students and faculty throughout the year who rely upon the stability of the infrastructure, depend upon the security, and push the limits of its possibilities. It integrates seamlessly into their learning and lifestyle.

A digitally enhanced campus has a green and healthy infrastructure and an IT support department with efficient processes. Staff who are expert practitioners of their craft, are partners with the community in enabling their success, communicate well and deliver results.

Objective 1 - Provide a robust infrastructure that delivers anytime, anywhere service *Initiatives*

- i. Ensure ample internet bandwidth to meet growing academic, scholarly and residence needs
- ii. Ensure wireless connectivity meets requirements for learning and teaching needs in academic areas and delivers an at-home experience in the residences
- iii. Reduce the footprint and environmental impact of our data centers
- iv. Implement technology lifecycles to ensure servers and network infrastructure meet current requirements

Objective 2 - Balance openness, agility and security

Initiatives

- i. Implement Identity Management processes to improve service and reduce risk
- ii. Implement Disaster Recovery system, and examine and mitigate Disaster Recovery risks
- iii. Examine and update security policies
- iv. Examine and implement technologies that simplify secure off-campus access
- v. Continually improve security awareness through widespread communication of security risks and initiatives

Objective 3 - Provide user-friendly, efficient processes with skilled staff to deliver service excellence

- Initiatives
 - i. Implement and improve IT Service Management through continual improvement. Increase the use of analytics, use analytics to improve processes and expand the Service Catalog
 - ii. Implement effective Project Portfolio Management practices to deliver campus-wide value from all investments and initiatives
 - iii. Develop staff to have the skill set required to succeed in a dynamic environment

Goal 4 - Effective IT planning and governance ensure campus priorities are achieved

A digitally enhanced campus has a clear roadmap, deliverables, project plans and assessment criteria to achieve its goals. Decisions are timely and value is produced from all investments.

Objective 1 – Develop IT funding models that sustain core service, support innovation, and facilitate growth

Initiatives

i. Create and implement a flexible multi-year IT capital budget to upgrade and improve campus infrastructure, and address lifecycle replacement.

Objective 2 – Implement an IT governance model that oversees the implementation of the strategic plan and assures alignment with strategic goals. *Initiatives*

 Create and implement a governance process that has input from all levels of campus; aligns, balances and prioritizes initiatives; ensures technical strategy is aligned with strategic goals. IT initiatives receive value, resources and risk are managed, and performance is measured.

Appendix A - IT Strategic Plan Goals & Associated IT Projects

Goal	Objective	Projects								
	dents, faculty and staff thrive by seamlessly integrating ology into their teaching, learning and scholarly ies.									
1.1	Provide a digitally rich ecosystem that respects the affordability of education and encourages access to technology	Guest wireless access Faculty Computer Replacement improvement project Development of lab space plans for entire campus including replacement cycles and financial responsibilities								
1.2	Position faculty and students for success by addressing access and affordability of teaching and learning resources.	etexts pilot TIP grants Mobile strategy - Academic apps Video recording for instructional purposes (Panopto) Expansion of communication plan								
2. Our community is efficient and creates value with our technical resources										
2.1	Support student success by leveraging technology to enable data-driven decision making	Starfish implementation Series of small administrative applications Organizing and Measuring our impact project CRM business case								
2.2	Support new digital business models by ensuring systems and processes are agile	Registrar's Workflow projects HR onboarding & offboarding (Yr 2) Banner XE Registration								
2.3	Ensure core administrative systems enable enhanced service to our communities	Event Management System implementation Banner XE implementation plan Mobile administrative system strategy Individualized web experience (Yr 2 & 3)								
3. Service excellence provides efficient support through robust, green and secure infrastructure and user-friendly processes										
3.1	Provide a robust infrastructure that delivers anytime, anywhere service	Bandwidth adjustments QUILT application for Student Residence Develop plan for improvement of student residence wireless systems Continue academic wireless system buildout Data Center improvement planning and implementation plan and install server infrastructure upgrades								
3.2	Balance openness, agility and security	Identity and Access Management system improvements remove NiS review and update security policies wiwth Security Council Communication of Security risks and special events in October								
3.3	Provide user-friendly, efficient processes with skilled staff to deliver service excellence	Project Portfolio plan Next steps in ITSM Staff training plans								
	ective IT planning and governance ensure campus ies are achieved									
4.1	Develop IT funding models that sustain core service, support innovation, and facilitate growth	Planning for Tyler Hall Phase II, Scales Hall, Wilber Tower, OBCR move downtown and School of Business Planning for Residence wireless buildouts Planning for lab requirements for next 3-5 years								
4.2	Implement an IT governance model that oversees the implementation of the strategic plan and assures alignment with strategic goals	IT Steering Committee								

Appendix B - IT Strategic Plan Goal alignment

DRAFT IT STRATEGIC PLAN			Goal Alignment									
			Tom	Tomorrow Plan Impacts				Academic Affairs Goals				
Goal	Objective	Impact 1	Impact 2	Impact 3	Impact 4	Impact 5	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	
		Students and Graduates	Education Ecosystem	Communities and Partnerships	Institution	Grand Challenges	Enrich academic excellence	Support personal growth	Provide educational opportunity	Promote social responsibility	Demonstrate accountability	
 Students, faculty and staff thrive by seamlessly integrating technology into their teaching, learning and scholarly activities. 												
1.1	Ensure our faculty and students have access to teaching and learning resources that respects the cost of education and positions them for success		х	х		х				х		
1.2	Position faculty and students for success by addressing access and affordability of teaching and learning resources.	х	Х				х		х			
2. Our community is efficient and creates value with our technical resources												
2.1	Support student success by leveraging technology to enable data-driven decision making	x			х				x	Х		
2.2	Support new digital business models by ensuring systems and processes are agile				Х			Х	х		х	
2.3	Ensure core administrative systems enable enhanced service to our communities	х		х	х				Х	Х		
3. Service excellence provides efficient support through robust, green and secure infrastructure and user-friendly processes												
3.1	Provide a robust infrastructure that delivers anytime, anywhere service	x	х	х	х	х				х		
3.2	Balance openness, agility and security		Х	х	Х					Х		
3.3	Provide user-friendly, efficient processes with skilled staff to deliver service excellence	Х			х			х	х			
4. Effective IT planning and governance ensure campus priorities are achieved												
4.1	Develop IT funding models that sustain core service, support innovation, and facilitate growth	х	х		х			х			х	
4.2	Implement an IT governance model that oversees the implementation of the strategic plan and assures alignment with strategic goals	х	х		Х			Х			х	