KEY PRIORITIES for
CSU Information Technology
Refreshed Plan

January 2020
The California State University continues to make progress on the Graduation Initiative 2025, accelerating student success and degree completion. The initiative represents the CSU’s commitment to remove obstacles to student success, enable students to experience transformation, and make a lasting impact on California. Because Information Technology (IT) permeates nearly every aspect of daily operations at the CSU’s 23 campuses, it continues to be a foundational element for many of the strategies the campuses have developed to achieve the ambitious GI 2025 goals.

In July 2016, campus IT leaders and the Chancellor’s Office Information Technology Services department (ITS) collaborated to define a set of guiding principles, visions and key priorities for a systemwide information technology strategic plan. The plan, “The CSU’s Key Priorities for Information Technology” has guided the CSU’s efforts for the last three years and enhanced innovation, enabled shared services, leveraged economies of scale, and improved communications and organizational effectiveness.

After three years of progress on the key priorities, campus IT leaders and the Chancellor’s Office ITS took stock of our accomplishments as well as reflected upon the ongoing efforts for the key priorities that have yet to be completed. The outcome of this assessment is a refreshed strategic plan that envisions continued momentum on many of our key priorities. It also contains some new actions to further enable information technology support for the mission of the CSU.
VISION STATEMENT:

As a system of 23 unique universities, the CSU faces both challenges and opportunities in delivering information technology. By leveraging the size and scale of the system, the CSU can strengthen its ability to deliver technology services that are critical to student success. This can be accomplished through:

Vision 1: Transformation and Innovation
With campus IT leaders at the forefront, the CSU can make strategic technology decisions and identify and support innovation that benefits the CSU’s more than 481,000 students.

Vision 2: Shared Services and Achieving Economies of Scale
As the largest higher education system in the U.S., the CSU has the opportunity to reap significant benefits by not replicating services unnecessarily and by leveraging its size.

Vision 3: Organizational Communication and Effectiveness
With so many stakeholders across the 23 CSU campuses and the geographical separation between campuses, comprehensive communication and effective collaboration are vital elements to the success of all systemwide technology efforts.

GUIDING PRINCIPLES:

a. Reduce institutional and segmental barriers for students
b. Enable data-driven decisions
c. Enable intersegmental operability where possible
d. Reduce costs, increase efficiencies and achieve economies of scale
e. Share resources and foster collaboration
f. Ensure privacy
g. Focus on service to students and faculty
h. Cultivate a diverse, inclusive and sustainable professional workforce
i. Enhance quality and strive for continual improvement
j. Increase communication and transparency
VISION 1
Transformation and Innovation

KEY PRIORITY 1.1
Support Innovation

SCOPE:
Innovation leads to new solutions to existing problems and enables transformation through the adoption of new technologies. The CSU’s IT leaders see innovation as a key focus for the system so that the CSU remains well positioned to meet the growing technology needs of our students, faculty and staff.

ACTIONS:
1. Develop online resources to promote innovation efforts via communication and collaboration.
2. Provide training courses and other learning opportunities to help campus technology communities learn about innovation efforts.
3. Develop strategies to promote campus innovation centers.
4. Create strategies to help campuses support cyberinfrastructure for faculty and student research endeavors.
5. Collaborate cross institutionally and with international standards organizations to promote innovation.
KEY PRIORITY 1.2
Create a “CSU Anywhere” Unified Student Experience

SCOPE:
Students must be able to easily access the tools and resources that facilitate student success. The CSU seeks to use technology solutions to reduce or eliminate friction points that students encounter. It should be seamless for a student to access or transfer into and between CSU campuses. Similarly, the resources students need should be as available at one campus as any other, and the look, feel and navigation of a CSU student through their virtual environment should be both easy, intuitive and consistent.

ACTIONS:
1. Review student support services to determine how they can be seamlessly integrated with the CSU’s Enterprise Resource Planning (ERP) environment to improve student experiences.
2. In support of Governor Newsom’s cradle to career initiative, work with the California Community Colleges and the California Department of Education to identify areas where data can be shared or leveraged to ease student transitions or populate degree planning tools.

KEY PRIORITY 1.3
Implement Enterprise Resource Planning Roadmap

SCOPE:
The CSU’s administrative functions are supported with a set of Enterprise Resource Planning (ERP) systems that have been highly customized to support diverse business practices. Eventually the CSU will need to migrate to new systems. To prepare for that future, the CSU’s ERP strategy articulates the importance of reducing technical debt. The strategy prioritizes enabling new functionality via an integration layer platform instead of creating new customizations within the ERP systems.

ACTIONS:
1. Implement an Integration Platform to create an ERP integration layer, enabling flexibility and allowing improved, more modern user interaction with the data that resides in the CSU’s ERP systems.
2. Actively work to reduce technical debt in order to prepare for the eventual transition to a new, likely a software as a service model, ERP solution.
3. Track ERP market trends to be in a position to know well in advance when the time is right for the CSU to begin moving to newer ERP technology.

KEY PRIORITY 1.4
Implement Cloud Strategy and Roadmap

SCOPE:
Cloud computing offers increased flexibility, reduced capital requirements, improved disaster recovery, and enhanced reliability. The CSU has developed a cloud transformation strategic framework that defines how campus IT departments can benefit from the advantages of the cloud.

ACTIONS:
1. Refine and implement the strategic framework that has been developed to guide campuses through cloud transformations for disaster recovery and research computing.
2. Complete the process for generating systemwide cloud services procurement vehicles.
3. Explore the possibility of cloud management as a service.
4. Create and provide cloud assessment tools that include technical and financial components.
5. Define the metrics of success for transitioning to cloud services.
6. While continuing to support legacy CMS systems, create new ERP functionality in the cloud wherever feasible.
7. Prioritize and explore opportunities to migrate to cloud based software whenever possible via systemwide agreements.
VISION 2
Shared Services and Achieving Economies of Scale

KEY PRIORITY 2.1
Develop a Data Repository for Business Intelligence & Decision Making

SCOPE:
Collecting and normalizing the vast amount of CSU data (currently located in many separate technology systems) into one accessible location, the CSU Data Lake will enable the creation of customized analysis, dashboards, reports and predictive analytics. This enhanced business intelligence data will support academic and administrative information needs.

ACTIONS:
1. Collaborate with appropriate stakeholders to create a systemwide data usage and analytics advisory committee.
2. Develop and implement a comprehensive set of data standards to support business intelligence.
3. Provide authorized users at the Chancellor’s Office and campuses with access to the data lake.
4. Populate the new CSU Data Lake with all relevant CSU system data, creating a single source of daily and longitudinal data for supporting analysis and decision-making.
5. Build a community of practice around the CSU Data Lake. Communicate broadly about its benefits, and roles and responsibilities for managing and accessing it.
KEY PRIORITY 2.2
Enable a Common Identity

SCOPE:
Developing a unified, common CSU identity will optimize student access to CSU services and resources. The use of a common identity will also reduce friction, improve the student experience, enhance student outcomes data collection, and promote collaboration between California educational sectors to ease student transitions.

ACTIONS:
1. Develop a roadmap and guiding principles for the use of a common identifier within core administrative and educational systems.
2. Establish a common identity specification, for the exchange of identity verification among participating institutions.
3. Implement a person data management system, operational practices and governance processes.

KEY PRIORITY 2.3
Create Shared Services

SCOPE:
Enhancing efficiencies across all campuses by sharing expertise, reducing costs and putting in place common operating practices will allow the CSU to better use its resources. The system is uniquely positioned to leverage shared services due to the common hardware and software used by all campuses.

ACTIONS:
1. Look for opportunities to distribute functions to campuses using a shared center of excellence and shared funding model.
2. Assess the feasibility of creating a CSU ‘technology rapid response team’ that can be called up to assist a campus during a natural disaster or other major event that impacts the ability of the campus to maintain their core technology services.

KEY PRIORITY 2.4
Enable and Support Information Security and Privacy

SCOPE:
Addressing information security and privacy within all facets of delivering technology services is critical and needs to be built into the lifecycle of technology. Collaborating to improve information security and privacy across the CSU will enhance our capabilities and reduce the duplication of efforts, resulting in a stronger privacy posture across the CSU.

ACTIONS:
1. Develop a systemwide information security strategy.
2. Improve how information security reviews and assessments are incorporated into technology procurement processes.
3. Complete the implementation of multi-factor authentication for access to all sensitive resources.
KEY PRIORITY 3.1
Enable and Support a Technology Workforce Strategy

SCOPE:
The CSU must be able to attract, grow and retain a diverse, inclusive, professional, and engaged technology workforce in order to provide the functions and services needed to support the mission of the CSU.

ACTIONS:
1. Develop a strategic focus to foster and grow and sustain diversity, equity and inclusion efforts for the CSU’s technology workforce. Efforts should include:
   • Encouraging greater diversity among technology staff within the CSU.
   • Collaborating with technology leaders from UC and CCC to support diversity, equity and inclusion in California public higher education.
   • Acknowledging the critical role of technology in supporting equity at all of our institutions.
2. Support Systemwide Human Resources as they conduct an IT classification review.
3. Collaborate on methods to attract, grow and retain an effective IT workforce.
4. Improve the annual Cal State Tech Conference to enhance the participation and focus on student success. Regularly assess the conference to assure that it continues to add value to the CSU.
KEY PRIORITY 3.2
Enhance Professional Development and Training

SCOPE:
Because the employees that design, implement, support and manage CSU technology efforts are critical to the success of the institution, it is imperative to provide them with training and professional development opportunities.

ACTIONS:
1. Collaborate on addressing common technology staff training needs and develop an annual plan outlining CSU technology training opportunities for each year.
2. Create a leadership development program for future CSU technology leaders by building upon established higher education technology leadership development programs, such as EDUCAUSE institutes.
3. Establish badging program for CSU technology workforce training and collaboration achievements.
4. Make it a standard practice to include training delivery and access to designated experts on all new systemwide technology contracts.

KEY PRIORITY 3.3
Enhance Technology Communications, Engagement and Collaboration

SCOPE:
The Chancellor’s Office ITS Communications and Engagement team supports information-sharing about systemwide technology efforts, fosters two-way communication, and promotes collaboration among the many people who support technology across the CSU.

ACTIONS:
1. Create recurring opportunities for campuses to give feedback about ongoing systemwide technology programs supported by the Chancellor’s Office.
2. Provide regular reporting on Chancellor’s Office activities for campus technology leaders and committees.
3. Develop methods and tools to foster collaboration and encourage sharing of technology expertise across the CSU.

KEY PRIORITY 3.4
Improve Technology Procurement

SCOPE:
Information technology purchases happen every day at campuses and collaboration on purchases to leverage the size of the CSU can reduce costs for campuses. Additionally, information-sharing between campuses about technology product research, negotiated terms and compliance assessments will reduce duplication of effort across the system.

ACTIONS:
1. Implement a process to manage a prioritized list of IT products/categories that should have systemwide purchasing agreements.
2. Create a dedicated technology focused procurement team that facilitates systemwide efforts and support the Chancellor’s Office procurement department in its efforts to create purchasing vehicles for campuses to leverage economies of scale.
3. Develop a tool and a process to eliminate duplicate technology procurement efforts across the CSU. The solution should address information sharing about accessibility and information security reviews.
4. Adopt a “Request for Innovative Ideas” approach towards technology procurements where the problem is the basis for the request for proposal process.

KEY PRIORITY 3.5
Enable Digital Transformation

SCOPE:
Digital transformation can streamline operations through the use of technology to optimize business processes. This type of transformation requires not only process change but also cultural change to adopt new ways of doing things.

ACTIONS:
1. Develop technology strategies to improve inter-campus business processes and workflows.
2. Collectively identify and understand who is doing things well and what is going on with the market.
3. Encourage and support the inclusion of formal change management and Lean process improvement principles in digital transformation projects.
Key Priorities for CSU Information Technology

23 California State University Campuses