The CSUSM Technology Strategic Plan

Technology trends are impacting society, shaping perspectives, and shifting expectations. Technology has become core to our life experiences, and our daily immersion in technology is continually changing perceived needs and service expectations. This digital future will not only be electronic versions of paper processes, but potentially new methods, which may be entirely different and will require services that are highly efficient and secure. As we look forward, students in particular will expect institutions to provide services uniquely suited to their academic needs and services that are digitalized and available beyond traditional service delivery methods. These changing expectations and perceived needs will lead to the adoption of new technology-supported applications that will provide capabilities that will make the university more efficient and productive.

To address these challenges, in 2017 Cal State San Marcos (CSUSM) conducted a comprehensive and thoughtful campus-wide process to develop a new *Technology Strategic Plan*. The following plan establishes CSUSM's technology vision and framework that will guide the university's IT environment and adoption of new technologies, systems, and services over the next five years. While the technology landscape is complex and changing, this plan outlines how CSUSM will *innovate, engage, connect, and inform* our decisions and ensure alignment of information and technology to the needs of the campus community.

CSUSM's *Technology Strategic Plan* is an aspirational framework and living document. This plan and the supporting structures will be continually referenced, reviewed, and updated. All units across the campus are encouraged to use this document as a context for evaluating technology investments and executing plans that are in alignment with the goals and strategies outlined. This plan should be used to aid in the development of divisional and unit level technology plans. Projects associated with this plan are approved by the *Information Management Steering Committee* (IMSC) for formal inclusion.

Our Plan
Themes, Goals & Strategies

The following document outlines the *Technology Strategic Plan* for CSUSM. This document includes four plan themes, eight *goals* and twenty-four *strategies*. The appendices include additional supporting materials to highlight the alignment of each of the strategies to the campus' strategic plan, our processes themes and trends, and a list of current and proposed projects.

INNOVATE

We innovate through the exploration and adaptation of new academic and administrative technologies that meet the needs of our current and future faculty, staff, students, and the needs of a dynamic and evolving campus.

Goal #1 – ENSURE AN ADAPTABLE AND SUSTAINABLE TECHNOLOGY ENVIRONMENT

    1.1 **CSUSM continuously improves**, deploying new systems, services, and strategies that improve efficacy and efficiency.

1.2 **CSUSM delivers service excellence**, meeting evolving needs and expectations.
1.3 **CSUSM uses resources sustainably**, leveraging fiscal and personnel resources through continuous training and adaptation.

Goal #2 – DEVELOP A SEAMLESS AND PERSONALIZED EXPERIENCE FOR EACH CAMPUS COMMUNITY MEMBER

2.1 **CSUSM enables a mobile experience**, providing universal access to services and resources.
2.2 **CSUSM rethinks processes and services**, utilizing technologies that are personalized and paperless to serve the digital world.
2.3 **CSUSM fosters student success**, adopting accessible systems and services that support retention and timely progress to degree.

ENGAGE

We inform, educate, and advance knowledge through technology platforms that promote critical thinking, develop communication skills, and create personal engagement.

Goal #3 – DELIVER TECHNOLOGY THAT ENHANCES LEARNING AND FACILITATES THE EXPLORATION OF KNOWLEDGE.

3.1 **CSUSM engages campus constituents**, integrating intuitive technology with customer-centric services, learning tools, and campus involvement.
3.2 **CSUSM encourages life-long learning**, expanding knowledge, inspiring confidence, and developing proficiencies through training and professional development programs.
3.3 **CSUSM champions the adoption of new technologies**, through differentiated learning opportunities and one-to-one guidance.

Goal #4 – PROVIDE DYNAMIC VIRTUAL AND PHYSICAL SPACES THAT EFFECTIVELY SUPPORT THE CAMPUS

4.1 **CSUSM transforms learning & working environments**, exploring technologies that support faculty pedagogy and student learning, provide equal access, and create effective working areas.
4.2 **CSUSM commits to modern technology**, balancing fiscal sustainability with priorities for technological currency.
4.3 **CSUSM responds to unique needs**, deploying discipline-specific technology in classroom, research, and laboratory spaces.

CONNECT

We provide technology services that bring together students and their university, support faculty scholarship, and facilitate administrative services.

Goal #5 – EMBRACE EMERGING TECHNOLOGIES TO BUILD COMMUNITY AND STRENGTHEN COLLABORATION

5.1 **CSUSM transcends organizational boundaries**, using common platforms and systems that promote campus-wide collaboration.

5.2 **CSUSM expands access to instruction**, expanding the use of affordable instructional materials that align with the needs of students who are always connected and always online.

5.3 **CSUSM connects people**, enhancing community by facilitating meaningful communication.

Goal #6 – FACILITATE CONNECTIONS THAT PROMOTE DISCOVERY AND KNOWLEDGE

6.1 **CSUSM strengthens research and scholarship**, supporting evolving fields of interest, changing methodologies, and collaboration.

6.2 **CSUSM cultivates the exchange of ideas**, facilitating dialogue and collaboration through diverse channels of communication.

6.3 **CSUSM unites a digital campus**, delivering timely, convenient, and personalized communications that connect the community to relevant information and resources.

INFORM

We maintain a secure, high quality, and data-supported decision-making environment through technology resources and systems that promote institutional effectiveness and student success.

Goal #7 – SUPPORT INFORMED DECISION-MAKING WITH INTEGRATED AND RELIABLE DATA

7.1 **CSUSM guides decision-making**, using computing platforms and services that help to analyze, inform, and guide strategies.

7.2 **CSUSM integrates quality data**, providing a secure, reliable and accessible information repository.

7.3 **CSUSM extends data analysis**, deploying self-service tools that enable independent inquiry and facilitate actionable insights.

Goal #8 – ENSURE PRIVACY AND PROMOTE SECURITY THROUGH TRANSPARENT AND RESPONSIBLE USE OF DATA AND SYSTEMS

8.1 **CSUSM values privacy and security**, balancing the security of information with appropriate access and compliance.

8.2 **CSUSM adapts to changing requirements**, providing ongoing security awareness training, proactively securing systems, and effective data governance.

8.3 **CSUSM uses data responsibly**, committing to transparency and public disclosure.

Our Technology LANDSCAPE
Guiding Principles of the Technology Strategic Plan

These guiding principles of the Technology Strategic Plan reflect the collective views and expectations of our technology support culture and how the organization conducts its business. It encompasses our beliefs and will guide our implementation of this Plan in all circumstances, irrespective of changes in goals, strategies or type of work. These principles are a core element of the Plan, as they serve to create and communicate to everyone what is important within the Technology Landscape of CSUSM.

In order to implement this Plan, CSUSM will,

- **LEAD** technology initiatives for positive change.
- **ALIGN** technology initiatives to leverage the best technology today and tomorrow.
- **NAVIGATE** the complexities to identify solutions tailored to the needs of the campus community.
- **DELIVER** a reliable and secure environment that maintains operational integrity and a stable environment.
- **SUPPORT** the campus community by responding in a timely and efficient manner.
- **COMMUNICATE** with campus stakeholders on technology projects, decisions, needs and resources.
- **ACCOMPLISH** stated outcomes through transparent decision-making and effective utilization of campus resources.
- **PARTNER** with campus and CSU colleagues to build upon common needs and seek collaborative outcomes.
- **ENSURE** a proficient and diverse IT workforce built upon the teamwork, collegiality, and competence of our people.

APPENDIX A – IT Strategic Plan Quick Sheet
Summary of Themes, Goals, & Strategies

	Goal	Description
INNOVATE	Goal #1 – Ensure an adaptable and sustainable technology environment	"CSUSM continuously improves, delivers service excellence, and uses resources sustainably."
	Goal #2 – Develop a seamless and personalized experience for each campus community member	"CSUSM enables a mobile experience, rethinks processes and services, and fosters student success to support retention and timely progress to degree."
ENGAGE	Goal #3 – Deliver technology that enhances learning and facilitates the exploration of knowledge	"CSUSM engages campus constituents, encourages life-long learning, and champions the adoption of new technologies."
	Goal #4 – Provide dynamic virtual and physical spaces that effectively support the campus	"CSUSM transforms learning & working environments, commits to modern technology, and responds to unique needs; deploying discipline-specific technology in classroom, research, and laboratory spaces."
CONNECT	Goal #5 – Embrace emerging technologies to build community and strengthen collaboration	"CSUSM transcends organizational boundaries, using common platforms and systems that promote campus-wide collaboration; expands access to instruction, and connects people."
	Goal #6 – Facilitate connections that promote discovery and knowledge	"CSUSM strengthens research and scholarship, cultivates the exchange of ideas, and unites a digital campus."
INFORM	Goal #7 – Support informed decision-making with integrated and reliable data	"CSUSM guides decision-making, using computing platforms and services that help to analyze, inform, and guide strategies via a secure, reliable and accessible information repository deployed as self-service tools that enable independent inquiry and facilitate actionable insights."
	Goal #8 – Ensure privacy and promote security through transparent and responsible use of data and systems	"CSUSM values privacy and security, balancing the security of information with appropriate access and compliance, and using data responsibly with a commitment to transparency and public disclosure."

APPENDIX B – Our Process

Input Process and Theme Development

The development of this plan required an input process that was more thorough than any technology strategic planning process previously used by CSUSM. Our process included twenty-two (22) formal campus focus groups that gathered thousands of comments from over 500 faculty, staff, and students. Sessions were conducted with all divisions and colleges, with additional feedback collected via classroom visits and open forums. Additionally, the Technology Policy & Advisory Committee (TPAC-a standing committee of the Academic Senate) engaged in an in-depth review process and provided input that is reflected throughout this plan.

This process provided a rare opportunity to engage in a wide-ranging dialog on 30 to 50 trends and themes, of which, 20 became part of the formalized session presentations. During each session, participants were asked to identify strengths, deficiencies, needs and expectations for campus IT services, considering both internal needs and external influences, including the 20 technology trends, and were asked to capture any additional ideas or innovations. Participants were then provided with five dots with which they would "vote" at the end of the session on the trends they felt would have the most impact on CSUSM. A total of 1,501 *votes* were collected, of which 805 were recorded by Faculty/Staff and 696 were from Students. The table below lists the top ranked themes by constituent group and combined.

Trends and Themes Polls

Emerging trends/themes from Campus Briefing Sessions
Ranked 1-10

	Combined		Faculty/Staff		Student
1	Supporting Research	1	Supporting Research	1	Supporting Research
2	Personalization	2	Personalization	2	Personalization
3	Security Privacy	3	Security Privacy	3	Security Privacy
4	Data Analysis and Decision Making	4	Data Analysis and Decision Making	4	Virtual Reality
5	Digitalization	5	Technology Enhanced Classrooms	5	Digitalization
6	Mobile First Perspective	6	Digitalization	6	Technology Enhanced Classrooms
7	Technology Enhanced Classrooms	7	Mobile First Perspective	7	Mobile First Perspective
8	Focus on Customer Service	8	Focus on Customer Service	8	Next Generation Learning Environments
9	Open Educational Resources				
10	Online Learning & Experiences				
10	Unified Communications				

Overall feedback received during the sessions included many references to CSUSM having a strong technology background as a campus and innovative culture. Due to the Technology Refresh Program, participants noted CSUSM's history of providing appropriate computing technology and there was a strong connection expressed as to a preference for the in-person IT service delivery model. Additional perspectives highlighted the general feeling that technology is changing faster, driving things, creating points of disconnection, and is having some negative impacts. Overall, community members expect

CSUSM to keep up technological advances within an appropriate framework. For instance, CSUSM doesn't want to see technology driving pedagogy. Additionally, there was a frequently recognized need for more training and communication around campus technology initiatives.

APPENDIX C – Strategy Alignment
Plan Strategies aligned to Process Themes and Campus Strategic Plan

* Denotes example projects. Divisional and unit level technology plans and projects associated with this plan are approved by the Information Management Steering Committee (IMSC) for formal inclusion. At the time of publishing, projects had not yet been proposed for inclusion in the Plan.

Strategy #	Trends and Themes	Current and Proposed Projects*	CSUSM Campus Strategic Plan
INNOVATE			
1.1	Digitalization, Technology Enhanced Classrooms, Focus on Customer Service, Strategic Alliances, SaaS, Breaking Down Silos	**Example:** CRM, Mobile App*, One-card, Mobile Instruction/Projection, Degree Planner*, QLT*, CALM*	1.3, 1.6, 2.3
1.2	Focus on Customer Service, Digitalization, Personalization, Non-Traditional Support, Technology Enhanced Classrooms, Breaking Down Silos		1.3, 1.6, 1.7, 2.3, 3.2, 5.5
1.3	Data Analysis & Decision Making, IT Training, Breaking Down Silos, Next Generation Learning Environment		1.2, 1.4, 1.6, 1.8, 1.9, 3.2, 3.3, 3.4, 3.6, 4.2,
2.1	Mobile-First, Digitalization, Self-Service, Focus on Customer Service, Non-Traditional Support, Software-as-a-Service		1.6, 1.7, 2.2, 2.3, 3.2, 3.5, 3.6, 3.7, 4.4, 4.5, 5.5
2.2	Digitalization, Personalization, Focus on Customer Service, Non-Traditional Support, Online Learning & Experiences, Breaking Down Silos, Software-as-a-Service, Hybrid & Cloud Computing		1.1. 1.2, 1.6, 1.7, 2.3, 3.2
2.3	Personalization, Non-Traditional Support, Machine Learning, Technology Enhanced Classrooms, Digitalization, Next Generation Learning Environment, Open Educational Resources, Virtual Reality		1.1, 1.4, 1.6, 1.7, 2.1, 2.5, 4.1

Strategy #	Trends and Themes	Current and Proposed Projects*	CSUSM Campus Strategic Plan
ENGAGE			
3.1	Personalization, Focus on Customer Service, Technology Enhanced Classrooms, Digitalization, Self Service, Digitalization		1.1, 1.2, 1.3, 1.6, 2.2, 2.3, 2.5, 3.2, 3.5, 4.2
3.2	Security & Privacy, Personalization, Technology Enhanced Classrooms, Machine Learning		1.2, 1.8, 3.4, 3.6
3.3	Next Generation Learning Environments, Technology Enhanced Classrooms, Online Learning & Experiences, Personalization, Self Service, Non-Traditional Support		1.1, 1.2, 1.6, 1.8, 1.9, 2.5, 3.2, 4.2, 5.2, 5.5
4.1	Technology Enhanced Classrooms, Next Generation Learning Environment, Online Learning & Experiences, Virtual Reality, Open Educational Resources		1.1, 1.2, 1.6, 1.8, 1.9, 2.6, 3.5, 5.5
4.2	Strategic Alliances, Supporting Research, Technology Enhanced Classrooms		1.6, 1.8, 1.9, 5.5
4.3	Supporting Research, Next Generation Learning Environment, Online Learning & Experiences, Technology Enhanced Classrooms, TPAC Memo		1.1, 1.2, 1.4, 1.5, 1.6, 1.9, 3.4, 3.7, 4.3

Strategy #	Trends and Themes	Current and Proposed Projects*	CSUSM Campus Strategic Plan
CONNECT			
5.1	Breaking Down Silos, Strategic Alliances, Digitalization		1.6, 1.7, 2.3, 3.2
5.2	Open Educational Resources, Non-Traditional Support, Mobile First, Personalization, Digitalization, Online Learning & Experiences, Technology Enhanced Classrooms		1.1, 1.2, 1.4, 1.6, 1.7, 1.9
5.3	Unified Communications, Digitalization, Mobile First, Self-Service, Security & Privacy		1.5, 1.6, 1.8, 2.2, 2.4 2.5, 2.6, 3.7, 4.4, 5.2
6.1	Supporting Research, Non-Traditional Support, Self Service, Strategic Alliances, TPAC Memo		1.3, 1.5, 1.6, 1.9, 3.4, 4.5

Strategy #	Trends and Themes	Current and Proposed Projects*	CSUSM Campus Strategic Plan
6.2	Online Learning & Experiences, Supporting Research, Strategic Alliances, Breaking Down Silos, Hybrid & Cloud Computing, TPAC Memo		1.2, 1.5, 1.6, 1.8, 1.9, 3.4, 3.7
6.3	Personalization, Digitalization, Unified Communications, Mobile First, Non-Traditional Support, Self-Service		1.6, 1.7, 2.3, 2.4, 2.5, 2.6, 3.2, 5.2, 5.5
INFORM			
7.1	Data Analysis & Decision Making, Personalization, Digitalization, Strategic Alliances, Breaking Down Silos		1.3, 1.4, 1.7, 1.10, 3.2, 4.1, 4.3, 4.4, 5.1
7.2	Data Analysis & Decision Making, Security & Privacy, Digitalization		1.3, 1.4, 1.10, 3.2, 4.1, 4.3, 4.4, 5.1, 5.4
7.3	Data Analysis & Decision Making, Security & Privacy, Digitalization		1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 3.2, 5.5
8.1	Security & Privacy, Digitalization, Hybrid & Cloud Computing, Software-as-a-Service, Strategic Alliances		1.6, 1.7, 1.10, 2.3, 3.2, 4.5, 5.2, 5.5
8.2	Security & Privacy, IT Training, Self Service, Hybrid & Cloud Computing, Digitalization		1.2, 1.3, 1.4, 1.5, 1.6, 3.2, 3.4, 4.2, 4.3, 4.5
8.3	Focus on Customer Service, Security & Privacy, Breaking Down Silos, IT Training		1.3, 1.4, 1.5. 1.6, 1.7, 2.3, 3.2, 4.4, 5.2, 5.5

APPENDIX D – Technology Strategic Planning Team
Campus Working Group and Strategic Consulting

Technology Strategic Planning Working Group (TSPWG)	Area Represented
Katie Chappell, Web & Social Media Specialist	Advancement
Jeff Charles, Associate Professor, History	Faculty Representative
Jennifer Fabbi, Dean, Library	Academic Affairs
Noah Gilbert, Data Administration and Analytics Lead	IITS Staff Representative - Data/Systems Focus
Scott Hagg, AVP, Enrollment Management	Student Affairs
Penny Lanese, Identity Management Account Technician	IITS Staff Representative - Infrastructure/Hardware Focus
Margo Lopez, Director of Integration and Identity Management Systems	Strategic Planning Working Group
Kevin Morningstar, Dean and CIO	IITS Leadership - CIO/Dean - Chair
Diane Petersen, Executive Director, Enterprise Applications and Analytics	IITS Leadership - Operational MPP
Katy Rees, AVP, Administration	Finance & Administrative Services
Jen Roberts, Consultant	Strategic Planning Working Group
Cameron Stevenson, Assistant Director, IP&A	Staff Representative
Thomas Swanger, PeopleSoft Solutions Manager	Strategic Planning Working Group
Barbara Taylor, Interim Director Academic Technology	Strategic Planning Working Group
Sarah Villarreal, AVP Community Partner Outreach	Community Engagement
Jennifer Williams, Chief of Staff and AVP Campus Climate	Office of the President

About the TPSWG

The Technology Strategic Planning Working Group (TSPWG) analyzed the data collected throughout the campus engagement process and synthesized the themes, goals, and strategies within the IT Strategic Plan. This working group functioned alongside an internal IITS Strategic Planning Team that was guided by an external consultant. The TSPWG met eight times to develop the draft goals and strategies. To provide transparency to both the ongoing process and the finalized plan, an IITS strategic planning website that includes all pertinent links to detailed supporting documentation developed throughout the process. Because this plan will evolve over time as goals are met and needs change, it is anticipated that the plan will be regularly reviewed and updated.

About Difference Consulting

The CSUSM Technology Strategic Planning Process and the development of the final report was guided and facilitated by Jen Roberts. Ms. Roberts is the CEO and founder of *Difference Consulting*, a company specializing in helping businesses strategically build, develop and leverage the unique talents of their own people and teams internally through consulting, executive coaching, and proprietary leadership development programs.