

Technology Strategic Plan

5 Year Strategic Plan

2018 - 2022

Technology Strategic Planning Introduction

- Technology trends are impacting society, shaping perspectives, changing life experiences, and shifting the expectations
- This process is creating a vision and framework for technology to support and accelerate the achievement of CSUSM's strategic goals over the next 3-5 years
- Prior Technology Strategic plan ended in 2015, since January, IITS has been engaged in a technology strategic planning process
- The themes & trends discussed today may or may not be included in the final report; our campus engagement phase is helping to clarify what is important to CSUSM

Technology Strategic Planning Introduction

- **This is not IITS' strategic plan:** Building a campus technology strategic plan so that CSUSM as an institution can recognize, utilize, and be responsive to the trends
- **Campus Engagement:** Sessions with all divisions and campus communities in the dialog
- **Core Groups:** Tech Strategic Planning Working Group, TPAC, IMSC
- **Transparency:** Posting updates to the web:
http://www.csusm.edu/iits/projects/strategic_planning/
- **Timeline:** Anticipate sharing the draft report in the Spring via campus approval processes; goal to publish by May '18

Today's 4 Most Important Contributions

- *What Have We Missed* – the first question is what have we missed – do you see emerging trends that aren't yet appearing in our list
- *Sharing Your Big Ideas* - the diversity of perspectives throughout the process highlights something new and reveals exciting opportunities
- *Clarifying Needs/Expectations/Concerns Open Dialog* – sessions will help us understand how technology can help our students and will impact our campus community
- *Prioritization* – what is important and impactful to CSUSM students & the University

Big 8 Ideas – Collecting Everyone’s Feedback

Use the sheet provided to add you Big 8 Idea

They can be from any of the themes we cover including new themes than may emerge

Forms will be collected at the end of the session

Group: _____
Date: _____

Name (optional): _____

Big 8 Ideas Exercise – *the idea is to generate as many ideas as possible within a short timeframe, focusing on quantity of ideas not quality.*

Theme: _____ 1	Theme: _____ 2	Theme: _____ 3	Theme: _____ 4
Theme: _____ 5	Theme: _____ 6	Theme: _____ 7	Theme: _____ 8 <i>Congratulations!</i>

Before You Leave Today -- Ranking the Trends

- *Before you leave today, please use the stickers provided to indicate the trends you believe will be the most important to CSUSM faculty, staff, and students.*
- *Place only one dot beside an item; please use all of your dots*
- *Over time these rankings will be consolidated with other groups to develop a perspective on the relative importance.*

Perspective on Technology Themes

- *Technology has changed our lives* and has become core to our life experiences
- *Our immersion in technology throughout every aspect of life is changing us* and in turn our expectations and perceived needs also change
- *New paradigms will continue to emerge* as well as new opportunities for those who are adept; many will change and some will be destroyed
- *Technology is a complex relationship* as it both informs us and frees us it distracts and constrains us
- *The 3 core technical abilities* include critical thinking, communication skills, and personal engagement

Mobile First

- Mobile access via an app or responsive website is becoming the default means of accessing information & services
- High level of interest across the university as departments are looking at mobile apps with an eye to their own relationships with students
- An App for Everything – challenge to support and maintain a common university-wide platform
- Mobile strategy should be part of every conversation related to new campus systems and online services

Personalization

- Individualized and Location Aware
- Students will expect universities to provide services uniquely suited to their academic and service needs
- Targeted and differentiated experiences will be aware of time & place
- Unique and personal profiles customized and based on analysis of data collected from a wide variety of sources

Digitalization

- Processes fundamentally native to a digital and connected world
- Not just electronic versions of paper processes, but potentially new methods which may be entirely different
- Efficient and secure processes that are device and location independent
- Requires data to be both securely stored and optimally shared to facilitate processes across the university

Technology Enhanced Classrooms

- Classroom technologies that meet faculty pedagogy requirements
- Available when needed, but out of the way when it is not needed or appropriate
- Moving beyond the lectern computer and projector to include wireless project and sharing; interactive & mobile
- Technology to promote active learning, engagement, & comprehension without itself being a distraction
- Bring Your Own Device (BYOD)
- Teaching on all four walls – classrooms that can flex and equally meet traditional and non-traditional formats

Online Learning & Experiences

- Technology is changing quickly and influencing the development of new models of teaching and learning
- Faculty and Students are looking for programs that address regional and global trends, meet workforce needs, and complement the university's mission
- Supports flexibility through multiple delivery methods and may help to reduce bottlenecks
- May include Virtual and Augmented Reality
- Supports diverse student learning styles and student schedule objectives
- Provides methods to expand the number of course and degree completion rates

Supporting Research & Research Technology

- CSUSM is committed to the success of faculty research and scholarship
- Annual grants are fast approaching \$20 million
- Technology is often central to supporting the work of faculty research
- Cloud providers will enable campus researchers to deploy new models of flexible and high powered compute resources
- Student research will also benefit with access to powerful cloud based resources as part of student learning experience

Machine Learning

- Adaptive, Predictive, and Responsive
- Intelligent systems that can provide automated services and information appropriate to the context or need
- Already here with Siri, Cortana, Alexa, Watson, Einstein...and many more
- Providing a host of services from search/information to automated controls
- Learning, responding to, and enhancing services that improve our daily lives

Next Generation Learning Environment

- LMS and other technologies that open up access, are mobile friendly, promote active student contributions, and facilitate faculty tasks
- Likely cloud hosted and based upon open standards
- Personalized tools and information
- Faculty and Learning Analytics
- Seamless interoperability with campus systems and other product extensions

Open Educational Resources (OER)

- Managing the costs of education and technology are areas of concern
- Increasing costs of textbooks and materials for students is pushing Open Educational Resources (OER) as an alternative
- The CALM program has been very successful on campus, saving CSUSM students over \$3 million dollars to date.
- Savings for AY 16/17 to date is \$922,500; savings have impacted over 21,750 students.
- OER provides the ability to customize materials, creating the "perfect" textbook instead of being bound to traditional print resources

Identity Management

- Identity Management is the key to every electronic service
- Easy, seamless and efficient access
- Efficient user provisioning, authentication, and access across all campus applications
- Multi-factor Authentication (MFA)
- Self service
- Role-based

Focus on Customer Service

- Customer Obsession – Amazon’s motto is “Earth’s most customer centric company”
- Expectations of services are evolving
- Standard operating strategies built around a Monday through Friday have already reached obsolescence
- Are we doing the right thing; is it really what people want
- Self-Service and In-Person Service Oriented Options
- Effective Communications
- Clearly Defined Service Expectations

Enabling & Supporting More Self Service

- Single connection point, or portal, where students, faculty, staff and administrative can manage their personal and professional information anywhere, anytime
- Recognizes that often people want to find their own solutions using universally available tools
- Personal help available when you need it, but it might not be face-to-face and it might not be a person
- Single point of contact, service catalogs, robust online reference, and automated self-help tools

Unified Communications

- Use of voice communications has changed dramatically changing the nature/needs of modern communications platform
- Questioning the need and expense for a phone on every desk
- Providing communications platform that support University services and protect life/health/safety is a core duty and responsibility
- Individuals want the ability to communicate from any device and in a variety of means to connect with the university

Strategic Alliances

- As part of the CSU, San Marcos is connected to the larger system and Higher-Ed communities within California as well as nation/world-wide
- Connected with others – system and other groups/communities
- Collaboration and adoption of best practices within and across campuses
- Shared services will add efficiencies and help CSUSM respond and provide services beyond fiscal/personnel/technical capabilities
- Common Purchasing

Security Privacy

- CSU is committed to taking strong measures to protect the security and privacy of campus information assets
- New policies from the CSU, as well as regulations from the state and federal governments, will require the campus to create new operational methods and purchase new technology solutions for compliance
- Failure to do so may violate state or federal law, and will result in not only audit findings, but fines and costs associated with addressing or mitigating failures and breaches.
- These efforts will require both technology and personnel resources

Data Analysis & Decision Making

- Decision making will be informed through the purposeful coalescence of data
- Multiple and distinct sources into a common set of data
- Moving beyond “canned” reports
- Dashboards and visual data presentations dominate
- Exploration and insights via slice & dice
- Overlapping Trends: Digitalization, Cloud Computing, Machine Learning, SaaS

Software As a Service (SaaS)

- Out of the box solutions - fast adoption of specialized and targeted services
- Hosted off-premises with limited customization in support of efficient management
- Always current methodology for providing services
- Challenged to provide a unified experience from a growing number of unrelated systems
- Data created and used will not be stored on campus systems – how to we ensure it is protected
- Data driven in our decision-making requires the consolidation of a growing number of "islands" of information

Hybrid & Cloud Computing

- Hybrid & Cloud Computing offers elastic resources
- Highly managed and secure infrastructure available for instant provisioning
- Ability to add & remove capacity and access infrastructure in minutes that is secure and scalable
- Can be disruptive and will drive significant change; IT will not run the same systems in the same way
- Cost model changes significantly from CAPX to OPX – CSU not budgeted for IT that way
- Costs are higher with cloud; this doesn't offer or attempt to save money as an objective

What Have We Missed

- *Are there other technology trends or innovative solutions that you have heard or seen that CSUSM should be considering as part of our Strategic Plan?*

Sharing Your Big Ideas

- *From your list of Big 8 Ideas, please share the trends, themes, and ideas you think we should be considering for the Technology Strategic Plan.*

How will these trends affect our future students

- *Considering all of the Themes & Trends which do you feel could have the most impact on students, student success, or the delivery of services to students?*

How will these trends affect our future students

- *From the perspective of your organizational unit (dept., college, division), which do you feel will have the most impact on CSUSM from an operations perspective.*
- *The impact could be positive, negative, or even reactive if you believe we are in a situation where we are trailing in adoption or response to something.*

Other Questions – Time Permitting

- What role can and should Information Technology play in helping the institution advance student success?
- What is the baseline technologies CSUSM should provide in classrooms? What about unfunded/non-grant research? Open Labs?
- What are the funding and support expectations for CSUSM programs and services? Are there areas of service or services not provide that should be?
- What are the key support expectations of faculty, staff, administrators, and students? What are the expectations for onsite staff availability, after-hours support, and online/self-support?

Wrap Up

- *Thank you participating today, we greatly value your time, perspective, and input.*
- *The information and perspectives we gathered today will help shape the final document.*
- *We hope that you will stay engaged through the various stages of the plan development.*
- *If you would like to volunteer for future opportunities to participate, please let us know.*

