SJSU SAN JOSÉ STATE UNIVERSITY

Deloitte.

SJSU Learning Space Upgrade and Academic Technology Strategy (LSUATS)

Campus-Wide Town Hall

December 4, 2024

Today's Agenda

01 Introductions

02 Project Objectives and Timeline

03 Summary of Future State Recommendations

04 Next Steps

05 Q&A

Introductions

Meet the Deloitte Team

James Qua
QA Partner

Jessica Kaplan
Engagement Lead

Amy Wittmayer
Teaching & Learning Lead

LJ Filetti
Project Manager

Drew Johnson
Project Consultant

Sanika Subhedar
Project Analyst

Why are we here?

Campus-wide town halls create a platform for us to engage with the broader SJSU stakeholders, allowing you to offer input, ensuring your voice is heard as part of the process while fostering transparency in all our activities.

Town Hall Principles

1. **TO INFORM**
   - Town halls are an opportunity to provide updates on the progress and status of the LSUATS project.
2. **TO BE TRANSPARENT**
   - Town halls allow us to share information openly about the goals, outcomes, and overall process throughout the project.
3. **TO SHARE AND RECEIVE INPUT**
   - Town halls are a platform to share project outputs and findings to broader stakeholders and garner feedback.
4. **TO BUILD EXCITEMENT**
   - Town halls generate excitement and enthusiasm for the broader transformation and help build momentum and buy-in across the campus.

Project Objectives and Timeline

Project Objectives and Goals

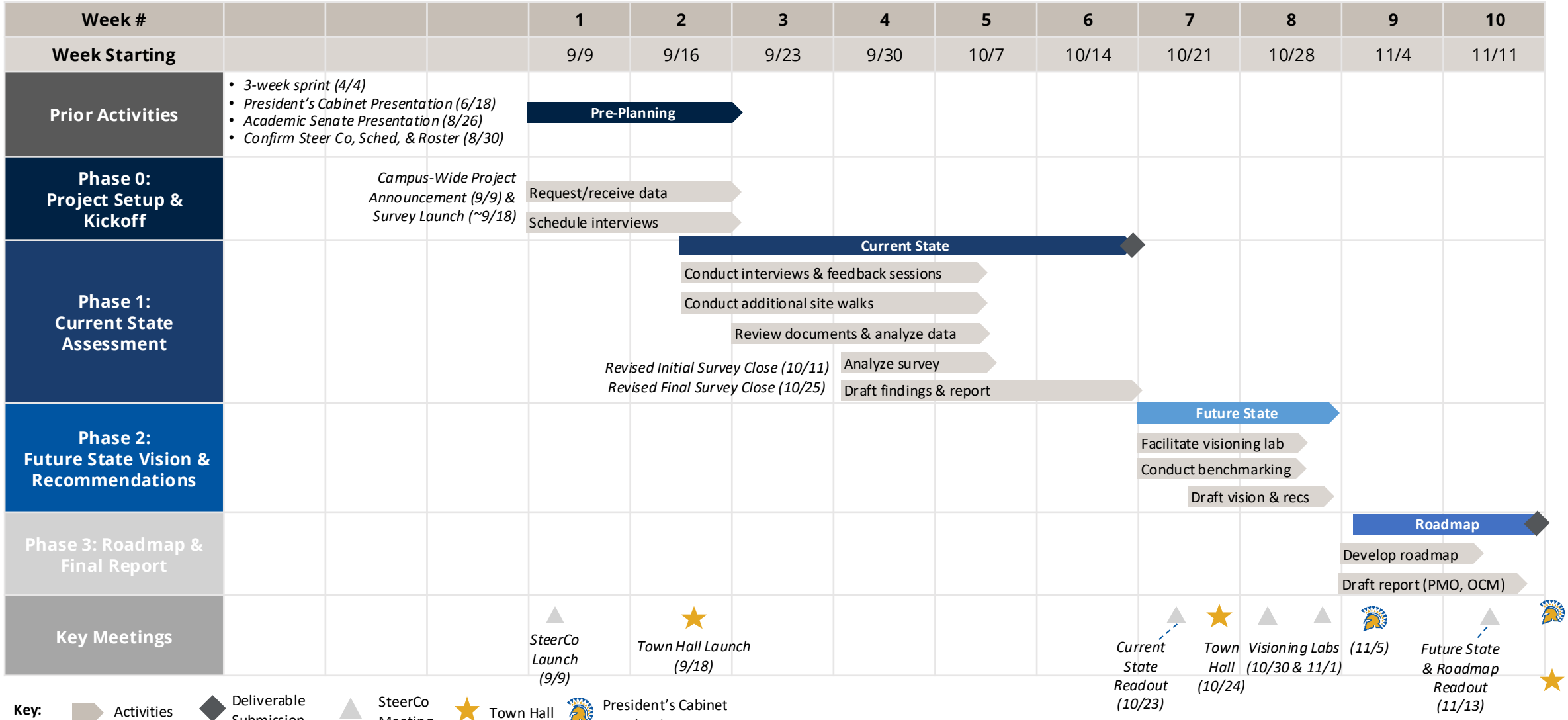
Based on aging academic technology, a desire to modernize, and the need to best prepare students for careers in the surrounding tech-advanced Silicon Valley community, SJSU's President's Cabinet has asked for Deloitte's support in developing the institution's academic technology strategy to lay the groundwork for the broader academic technology transformation.

Advance SJSU's mission and enable their academic technology transformation journey to best serve students and faculty by:

- Providing a thorough and accurate **Current State Assessment of Academic Technology** across the institution through interviews, detailed documentation reviews, and data analysis
- Developing a **Future State Strategic Vision and Plan** grounded in current state findings (incl. pedagogy and teaching and learning needs), industry leading practices and strategies, alignment on the future path forward, and gaps between the current and future state
- Creating a **multi-year Implementation Roadmap** with prioritized recommendations integrated into a timeline as well as the associated estimated costs and supporting PMO, OCM, and best practices for adoption of the long-term academic technology transformation and implementation

High-Level Timeline

This project focused on an initial 10-week assessment and strategy to tee up a broader academic technology transformation journey.



Summary of Future State Recommendations

SJSU's Vision for Academic Technology and Learning Spaces

The future state vision detailed below has been developed based on a comprehensive collection of information gathered from the Steering Committee visioning labs, survey responses, and stakeholder interviews.

What does the future hold?

- **Flexible Learning Infrastructure:** Create adaptable learning spaces that can seamlessly transition between various instructional and work modes without requiring additional planning or manpower.
- **Comprehensive Student Support:** Implement systems and resources to ensure that every student feels supported in achieving academic success, fostering an inclusive and supportive educational environment.
- **Workforce-Ready Learning Opportunities:** Provide hands-on learning experiences with cutting-edge technology that students will encounter in the workforce, aligning with SJSU's motto of powering Silicon Valley.
- **Expanded Technology Access:** Ensure that technology and network connectivity are accessible not only on the SJSU campus but also beyond, to bridge the digital divide and support every member of the SJSU community.
- **Showcase Event Spaces:** Develop dedicated event spaces that effectively highlight and showcase SJSU's diverse offerings and institutional strengths.

SJSU should offer state-of-the-art, collaborative, experiential, and inclusive learning spaces that support pedagogy.

We should align to our byline and brand of powering Silicon Valley.

We want to showcase the capabilities SJSU has, but currently don't have a space to do that.

Summary of Future State Recommendations

By focusing on the following recommendations, SJSU will enable an academic technology and learning space transformation. Note: the recommendations are mapped back to addressing the opportunities identified in the current state report. More details on how these initiatives were prioritized can be found in the implementation & roadmap section.

Academic Technology

- 1.1 Confirm Minimum Viable Classroom (MVC) with Campus Stakeholders
- 1.2 Academic Technology Refresh Strategy
- 1.3 Student Technology Requirements in Syllabus

Academic Operations and Support

- 2.1 Academic Technology Support
- 2.2 Learning Space Scheduling

Physical Classroom and Infrastructure

- 3.1 Physical Learning Space Upgrade Plan
- 3.2 Wireless Connectivity

Academic Strategy

- 4.1 Teaching and Learning Strategy

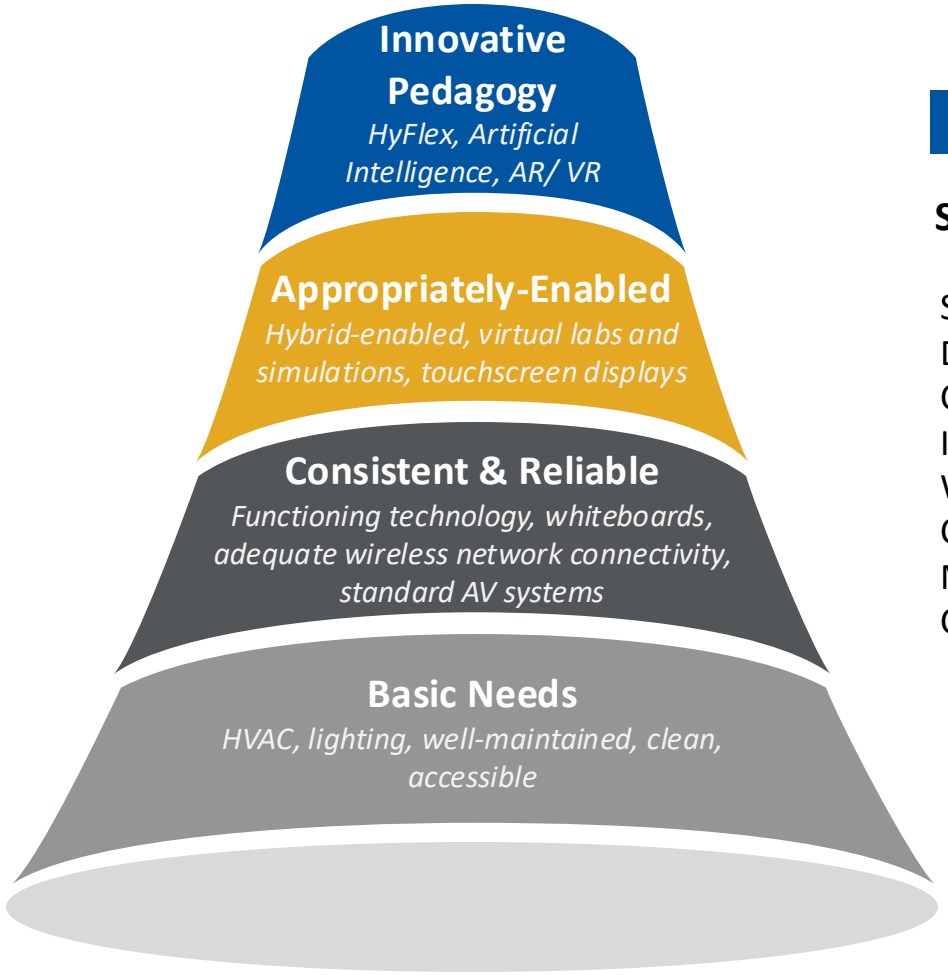
Funding

- 5.1 Academic Technology and Learning Space Budget and Funding Model

Priority: Now, Next, Later

Minimum Viable Classroom (MVC) Concept | Recommended Approach

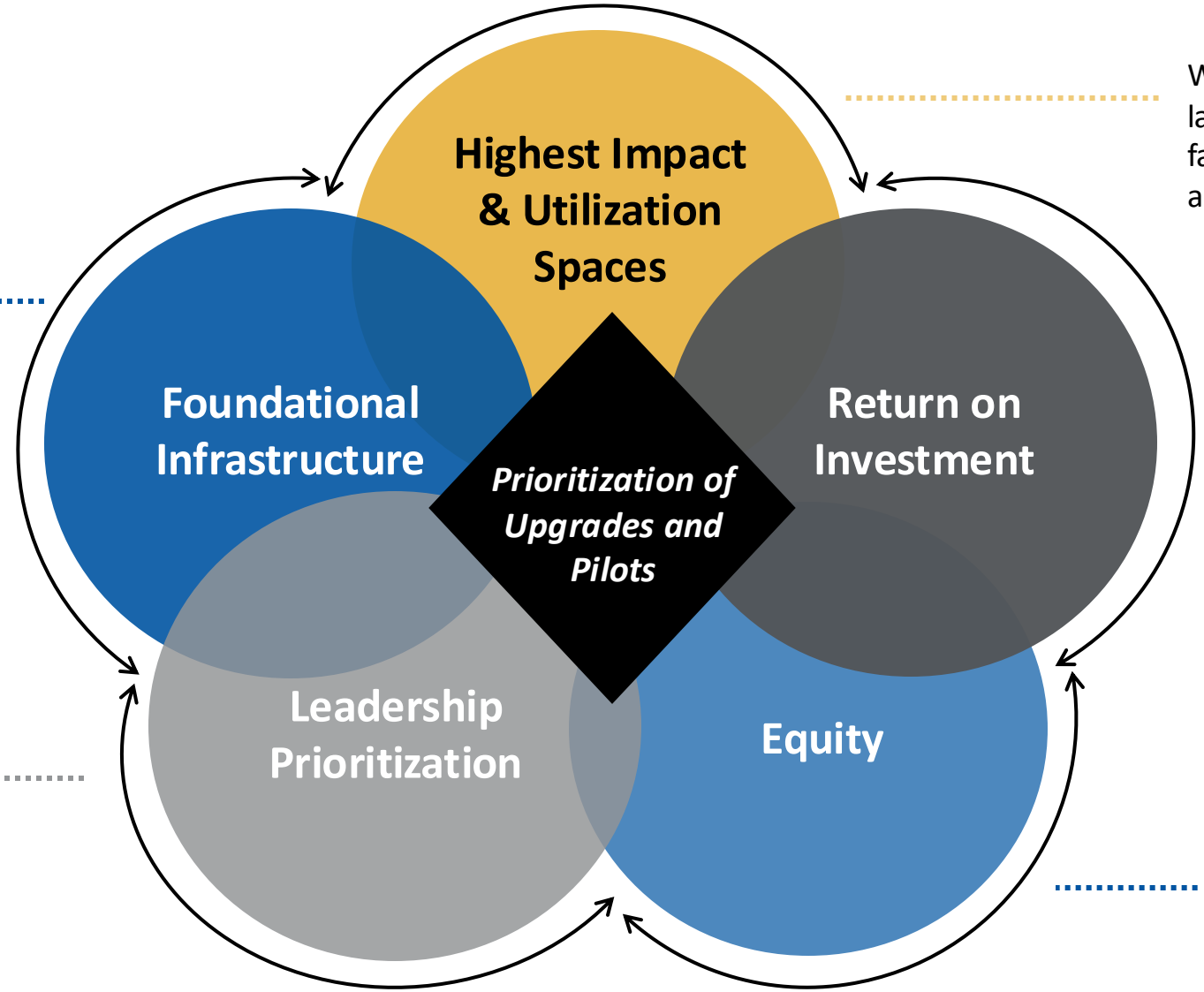
The MVC concept will allow SJSU to create a flexible, cost-effective learning space baseline equipped with essential technologies that enhance teaching and student engagement. It ensures that classrooms meet the basic needs of students & faculty, are adaptable to various teaching methods, and can be quickly upgraded or scaled to meet evolving educational needs.



Examples of Learning Space-type Considerations			
Smaller Classrooms	**Large Lecture Halls**	**Lab Spaces**	**Innovative Tech Pilot Spaces**
Single Projector Display, A/V User Connections, Interactive Whiteboards, Lecture Capture Systems, Modular Furniture, Charging Stations	High-definition Projectors & Screens, Integrated Surround Sound System, Digital Document Cameras, Microphone Options, Lighting Options	3D Printers and Scanners, Computer-Aided Design (CAD) software, Robotics Kits & Components, Laser Cutters & CNC machines	Virtual Reality (VR) & Augmented Reality (AR), Internet of Things (IoT) development kits, High-performance Computing Workstations, Artificial Intelligence (AI) & Machine Learning (ML) Platforms

Tiering of How to Prioritize Learning Space Upgrades

When exploring which learning spaces to upgrade to achieve MVC and/or pilot investments, SJSU should consider prioritizing and tiering learning spaces based on these five dimensions and questions.



Which spaces host the largest volume of faculty and students and are most utilized?

Which spaces do not have pre-existing infrastructure needs (e.g., HVAC, Wi-Fi, lighting)?

For the investment, which spaces will yield the highest and best outcomes (e.g., student outcomes, utilization, multi-purpose, branding) for the cost required?

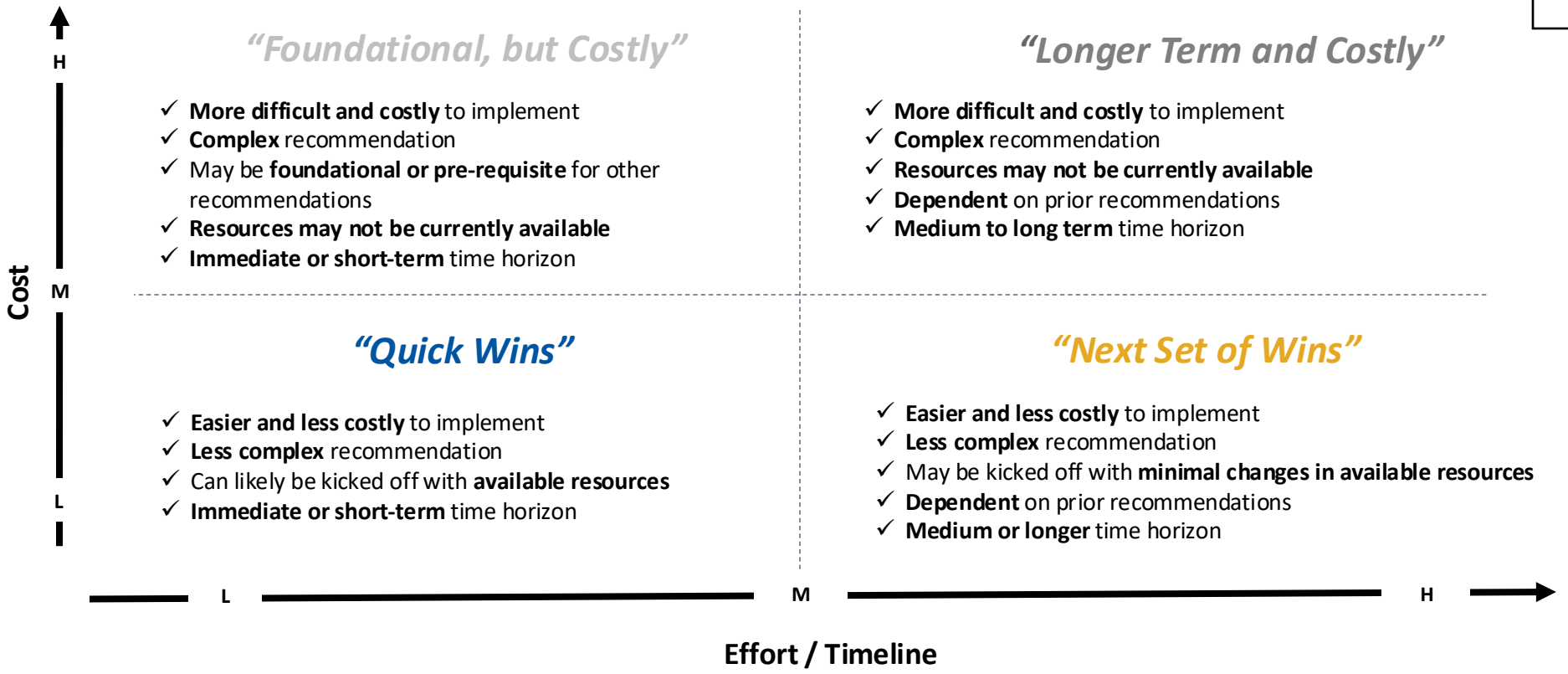
Are faculty and college leadership aligned on the importance and nature of the upgrade?

Are there equity gaps among colleges or students that should be addressed?

Recommendations by Quadrants – Definitions

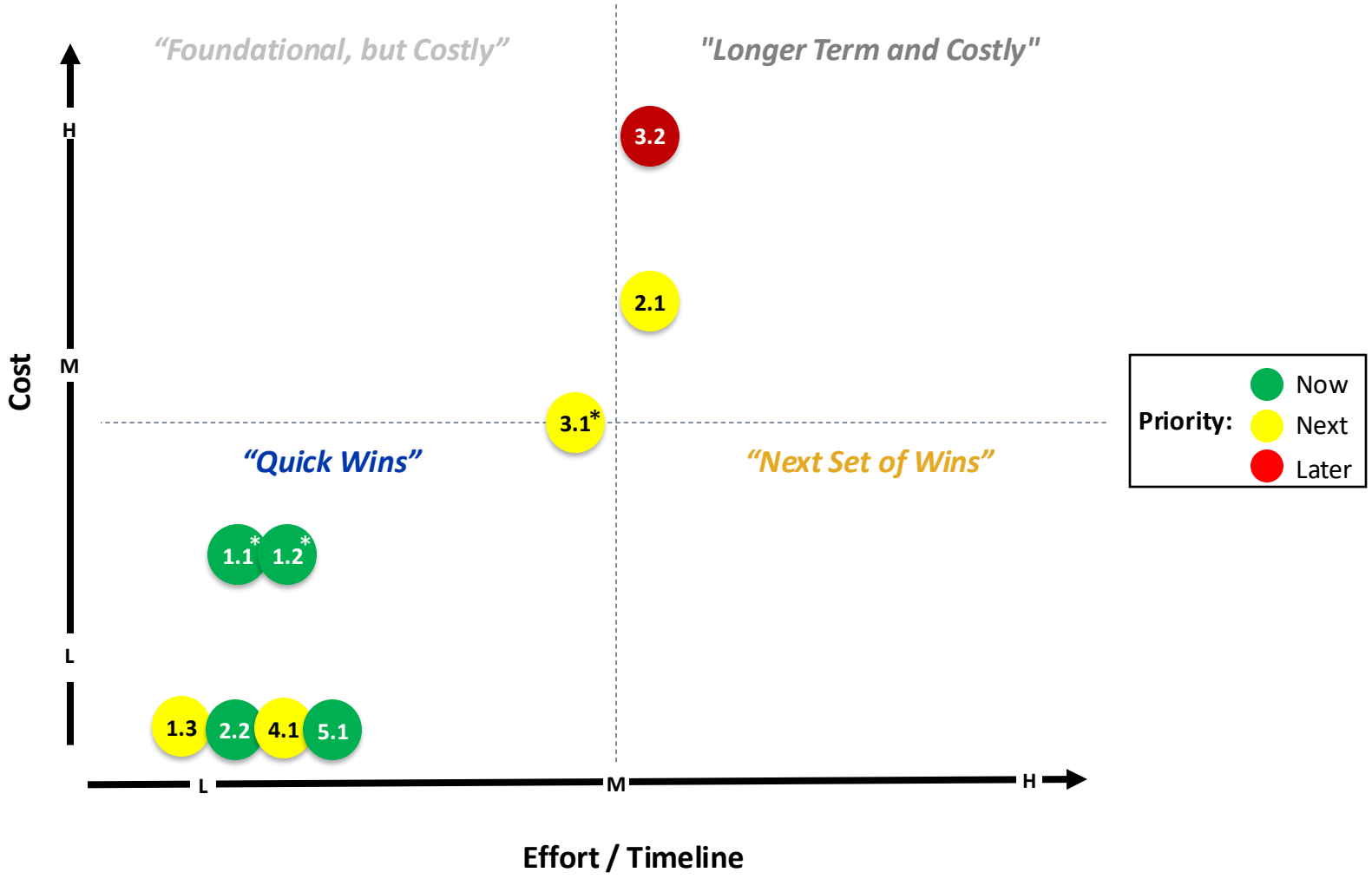
SJSU recommendations were placed in quadrants based on priority, effort / timeline, and cost, and then subsequently laid out on the 3-year implementation roadmap. See the four quadrant categories below.

Priority: Now, Next, Later



Recommendations by Quadrants

The recommendation priority, effort / timeline, and cost were determined via conversations with SJSU leadership and past experiences on similar engagements.



Future State Recommendations

- 1.1 Minimum Viable Classroom (MVC)
- 1.2 Academic Technology Refresh Strategy
- 1.3 Student Technology Requirements in Syllabus
- 2.1 Academic Technology Support
- 2.2 Learning Space Scheduling
- 3.1 Physical Learning Space Upgrade Plan
- 3.2 Wireless Connectivity
- 4.1 Teaching and Learning Strategy
- 5.1 Academic Technology and Learning Space Budget and Funding

*Initial plan/strategy for recommendation has no cost, but implementing the plan/strategy will have a cost.

Next Steps

Next Steps

Launching and operating an academic technology program with nine projects is a significant undertaking and invites the questions: What do we do now that we have these recommendations? Where do we go from here?

☑ **Seek broader stakeholder feedback on Future State Recommendations** during final Townhall on December 4.

2 **Present Future State report** to President's Cabinet on December 9 for final confirmation and prioritization.

3 **Mobilize** overarching governing body to continue the **academic technology transformation journey**

4 **Begin** on prioritized **quick wins** (e.g., MVC, Academic Technology Refresh Strategy, Learning Space Scheduling)

Remain Informed and Engaged

The project team has created a website for sharing information, providing updates and event reminders, and for gather input and feedback into the project.

Visit Project Website

The Deloitte team will be available following today's town hall to answer questions or collect feedback to inform the overall effort.

Chat Live

Q & A

Appendix

The Importance of Stakeholder Engagement – Everyone Needs a Seat at the Table

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FACULTY

We know what we need from a technology perspective to deliver our courses and engage students.

STUDENTS

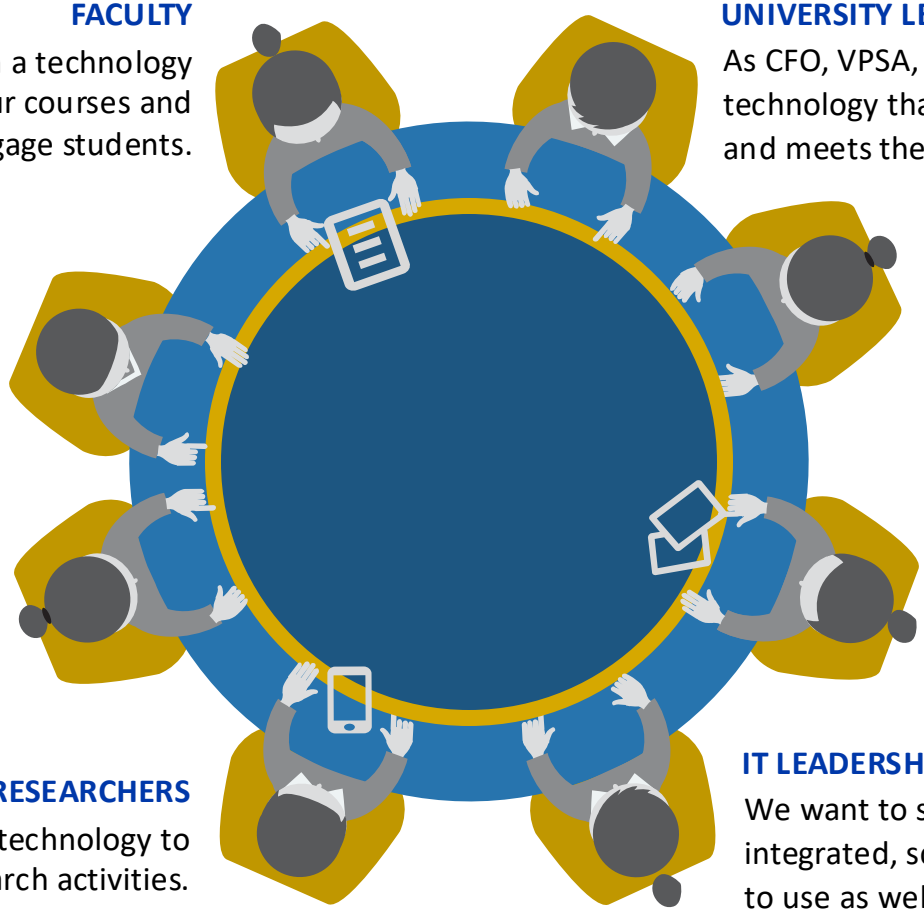
As undergraduate and graduate students, we would like a consistent and equitable experience and something that meets our different needs in terms of learning styles and modalities.

PROSPECTIVE STUDENTS

We want to visit campus and classes and be excited about the innovative use of technology.

RESEARCHERS

We need specific technology to engage in our research activities.



UNIVERSITY LEADERSHIP

As CFO, VPSA, Deans, and other leaders, we need technology that supports our overall mission and vision and meets the needs of our students, faculty, and staff.

PROVOST

We need technology that enables teaching and learning, and we want to design the classroom of the future.

FACILITIES

We understand our physical building structures, the pipeline of construction projects, and the underlying infrastructure supporting the classrooms.

IT LEADERSHIP

We want to select academic technology that is integrated, scalable, forward-thinking, and easy to use as well as easy for our staff to support.

In addition to engaging a diverse group of stakeholders, the project is led by a diverse Steering Committee:

Bob Lim	Traci Ferdolage	Stefan Frazier
Sehtej Khehra	Kim Knight	Kara Li
Jennifer Redd	Sahithya Swaminathan	Ignacia Villavelazquez-Hill

Current State Assessment: Foundation of Findings

Inputs Overview

Summary information on the four sources of input can be found below with more details later in the presentation.

Data Request

15+

Data sources gathered and analyzed

- **Historical data and reports:** Classroom technology spending, maintenance processes, and University policies
- **Utilization and scheduling data**: classroom usage and Lecture Room Inventory (University & college-managed)
- **Hardware and software inventory**: IMS service catalog, AV inventory lists, and schedule management software
- **Stakeholder-provided data:** Past benchmarking studies and feedback surveys specific to their college or unit

Campus-Wide Survey

Survey Response Distribution

97	61	119
Students	Admin & Staff	Faculty

- A campus-wide survey was conducted to **gather comprehensive feedback** from the SJSU community.
- The survey **received a total of 277 responses**, providing valuable insights.
- The survey was **open for a duration of four weeks** to ensure ample participation.
- **Distribution methods included** a QR code, publication on the project website, and email dissemination.

Interviews & Town Hall

- **A diverse group of interviewees** was selected to participate **in confidential interviews** focused on learning spaces and academic technology.
- Conducted interviews with **100+ individuals** across **more than 10 departments and colleges**, ensuring a **comprehensive understanding** of various perspectives.
- **Hosted an in-person Town Hall** on 9/18 with 45+ participants, fostering **open dialogue** and community engagement.

Site Walks

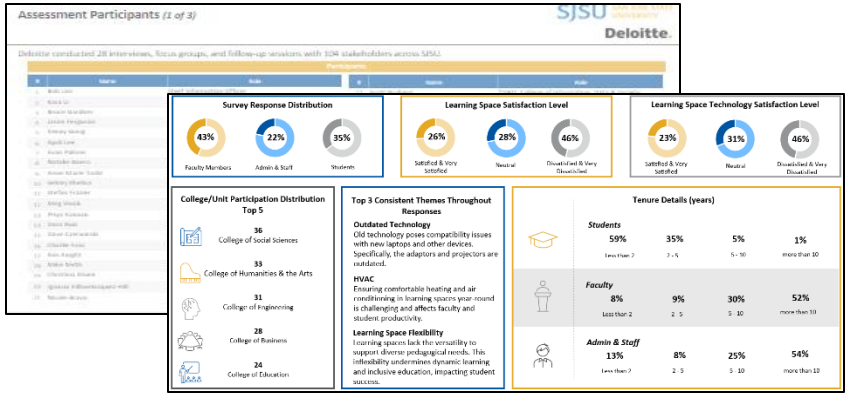
- Conducted site walks on two separate occasions, **visiting nine buildings** across the campus and **covering several different colleges**.
- Focused on observing a **broad range of learning space types**, including laboratories, small and large lecture rooms, and the Student Union.

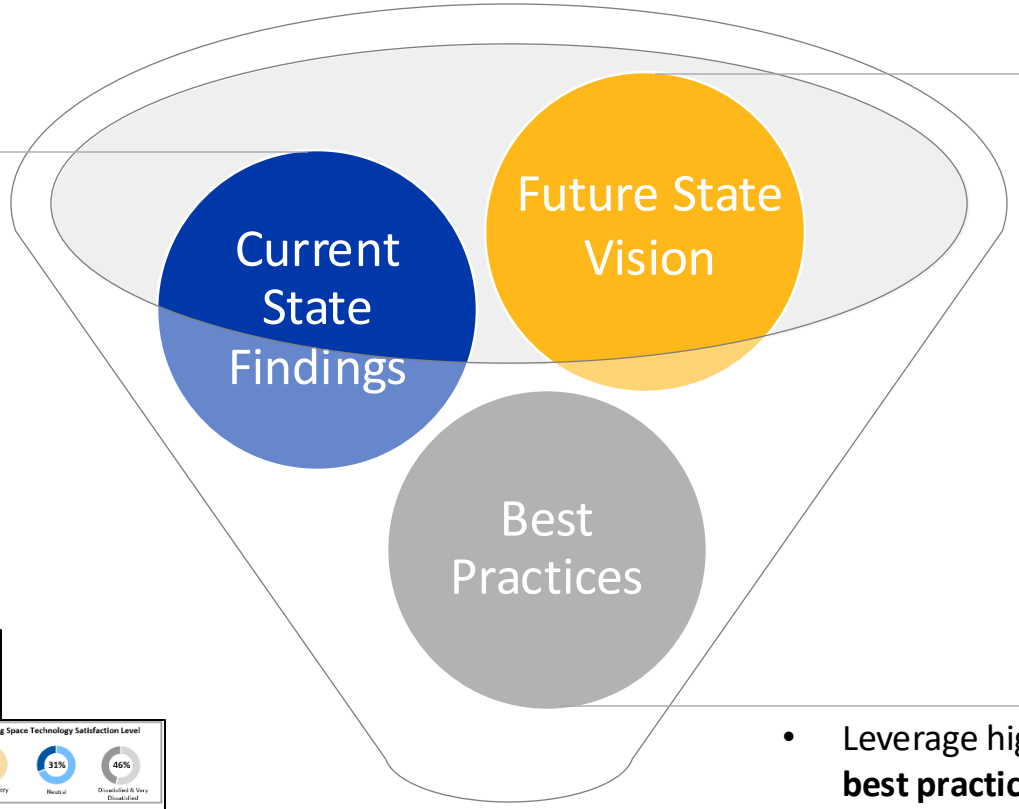
★ **Sites Visited**

Key Project Activities

Current State Activities

- Conducted **stakeholder interviews** across students, faculty, and staff as well as two **campus-wide townhalls**
- Distributed **campus-wide survey** and analyzed results
- Submitted **data request** and analyzed provided artifacts (e.g., hardware inventory, learning space utilization data, room diagrams)
- Conducted **site walks**

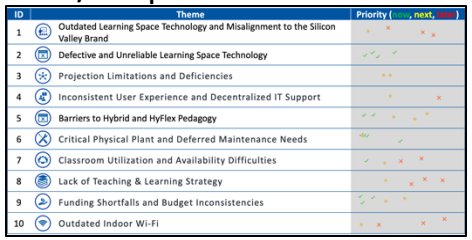




Academic Tech Roadmap & Final Report

Future State Activities

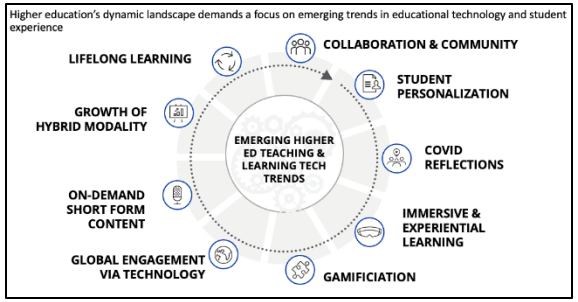
- Facilitate **visioning labs** to explore tech trends and align on future state academic tech vision and priorities
- Provide higher ed **case studies**
- Develop **future state recommendations**
- Build **prioritized roadmap** with PMO/OCM/adoption considerations



ID	Theme	Priority (now, next, later)
1	Outdated Learning Space Technology and Misalignment to the Silicon Valley Brand	
2	Defective and Unreliable Learning Space Technology	
3	Projection Limitations and Deficiencies	
4	Inconsistent User Experience and Decentralized IT Support	
5	Barriers to Hybrid and HyFlex Pedagogy	
6	Critical Physical Plant and Deferred Maintenance Needs	
7	Classroom Utilization and Availability Difficulties	
8	Lack of Teaching & Learning Strategy	
9	Funding Shortfalls and Budget Inconsistencies	
10	Outdated Indoor Wi-Fi	

Leading Practices

- Leverage higher education frameworks, **best practices**, and prior experience on similar engagements



Current State Key Themes: Summary of Strengths

Our findings and observations were distilled into key themes that highlight both the strengths as well as opportunities to enhance the overall posture of SJSU.

Strengths to Retain and Amplify	
Student-Focused Culture	**Foundation of Successful Spaces/Pilots**
Student Focused Support Faculty Commitment Loan Programs Accessibility	Modern Learning Space Examples SJSU Library
Strong Instructional Support	**Leadership Support**
Instructional Support	University Leaders Are Advocates

Current State Key Themes: Summary of Opportunities

Our findings and observations were distilled into key themes that highlight both the strengths as well as opportunities to enhance the overall posture of SJSU.

Opportunities to Improve and Enhance

Non-functioning Academic Technology

- Outdated Learning Space Technology and Misalignment to the Silicon Valley Brand
- Projection Limitations and Deficiencies
- Defective and Unreliable Learning Space Technology

Inadequate Academic Operations and Support

- Inconsistent User Experience and Decentralized IT Support
- Classroom Utilization and Availability Difficulties

Insufficient Physical Classroom & Infrastructure

- Critical Physical Plant and Deferred Maintenance Needs
- Insufficient Indoor Wi-Fi Capacity

Lack of Academic Strategy to Drive Technology Decisions

- Lack of Awareness on Teaching & Learning Strategy
- Barriers to Hybrid and HyFlex Pedagogy

Funding Challenges to Meet Academic Technology and Classroom Needs

- Funding Shortfalls and Perceived Challenges with Centralized vs Decentralized Budgets

Key Current State Findings

Three Fundamental Challenges Limiting SJSU

What started as an assessment of Academic Technology across SJSU's Learning Spaces quickly uncovered **three fundamental challenges limiting SJSU** from enhancing the Teaching & Learning experience and **demonstrating a general dissatisfaction with academic technology and learning spaces.**

1 SJSU **lacks investment of adequate funding and resources** to appropriately maintain the necessary technology and physical infrastructure that is expected of one of the nation's leading public institutions, and California's oldest public institution.

Less than $2,000 per learning space per year for IT maintenance and upgrades for spaces centrally managed by IT.[1]

Institutional priorities required **reallocating or declining nearly $1.4M of IT classroom funding** intended to improve classrooms to baseline expectations.[2]

Ratio of **students-to-IT-Staff of 325:1, one of the most understaffed across CSU,** and similar sized national schools.[3]

2 SJSU faculty and staff **struggle to articulate a future vision guided by pedagogical needs** due to a lack of focus on optimizing the teaching and learning experience and a greater emphasis on prioritizing basic needs over technology enhancements.

> *Its like assessing what Porsche I would buy, when I don't have the money to buy the Porsche*

> *Leave the shiny new things until everyone has access to the basics.*

> *We don't need cool learning spaces; we need efficacious spaces. Efficacious spaces are life changing.*

3 **Basic expectations of students and faculty are unmet**, with stakeholders prioritizing basic needs over advanced technology. The most desired features include universal connectivity (e.g., HDMI, USB-C, appropriate dongles), flexible furniture, basic functionality and operability, and clean, comfortable, and safe spaces.

> *Buildings continue to lack the basics like reliable projectors, speakers, and HDMI connectors.*

> *I'd like to teach through a semester without having to apologize to the students for something in the classroom not working properly.*

> *It is all too common for classroom projectors and other systems to malfunction.*

1) Source: *Historical IT spending on classroom technology over last 3-5 years.xlsx*
2) Source: *IT Budget Request Template 2018-19 through 2020-21 – CATS.xlsx* & email exchanges (includes: ~$400k for HDMI upgrades & ~$1M for other IT classroom upgrades and enhancements)
3) Source: *https://www.sjsu.edu/it/docs/about/IT-Org-Chart.pdf & https://www.sjsu.edu/facts-and-accomplishments/facts.php* (ratio = total student headcount / IT staff on Org Chart; compared to other CSU websites)

Summary of Recommendations *(1 of 2)*

- Recommendations are aligned to current state assessment findings and take into consideration SJSU's 2024 Vision, ITS and customer priorities, leading practices, and technology trends.

Area	Title	Recommendation Description
Academic Technology	**1.1 Confirm Minimum Viable Classroom (MVC) with Campus Stakeholders**	Develop and establish a minimum viable classroom (MVC) as a baseline classroom model that meets essential teaching and learning needs, allowing for rapid deployment and scalability across SJSU.
	1.2 Academic Technology Refresh Strategy	Create a comprehensive strategy that aims to systematically upgrade and replace outdated technology to enhance educational delivery, improve operational efficiency, and establish a future-proof infrastructure.
	1.3 Student Technology Requirements in Syllabus	Implement a prerequisite for faculty to include technology requirements in their syllabi prior to the start of classes to ensure students have ample time to procure the necessary software, OS, and/or hardware.
Academic Operations and Support	**2.1 Academic Technology Support**	Standardize and enhance academic technology support by further centralizing support services, standardizing processes, automating routine tasks, and enhancing communication with stakeholders.
	2.2. Learning Space Scheduling	Continue the effort to centralize all classroom scheduling, enhance the scheduling algorithm, and communicate the processes to all stakeholders involved to provide transparency in classroom scheduling.

Summary of Recommendations *(2 of 2)*

- Recommendations are aligned to current state assessment findings and take into consideration SJSU's 2024 Vision, ITS and customer priorities, leading practices, and technology trends.

Area	Title	Recommendation Description
 **Physical Classroom and Infrastructure**	**3.1 Physical Learning Space Upgrade Plan**	Develop a comprehensive learning space upgrade plan to ensure all learning spaces across the institution are modern, flexible, and conducive to innovative teaching and learning practices.
	3.2 Wireless Connectivity	Develop and execute plan to upgrade and enhance the wireless connectivity across the campus, ensuring robust, high-speed, and reliable connectivity that meets the growing demands of students, faculty, staff, and researchers.
 **Academic Strategy**	**4.1 Teaching and Learning Strategy**	Develop a university-wide teaching and learning strategy that aligns with the institution's mission and goals, enhances teaching effectiveness, and promotes student success through innovative, inclusive, and evidence-based practices.
 **Funding**	**5.1 Academic Technology and Learning Space Budget and Funding**	Develop a comprehensive academic technology and learning space budget and funding model that supports the strategic enhancement of academic technologies and learning spaces, ensuring they meet the evolving needs of SJSU students, faculty, and staff.