



California Community Colleges

# Systemwide Architecture Committee

Bi-Monthly Meeting

October 13, 2022

# The *Vision* + Digital Equity

*Anyone in California seeking a postsecondary education, regardless of what they look like, where they live, time since high school, and their preferred education modality should have on-demand access.*



# Agenda

- Welcome
- Information Security Update
- Assessing Systemwide Tool Investment: MyPath
- Common, System wide ERP
- MIS Redesign
- EdTech Grants Retrospective
- Common Course Numbering
- Vendor Management
- Wrap-up





# Information Security Updates

# Self-Assessment Preliminary Observations

## Annual Cybersecurity Self-Assessment

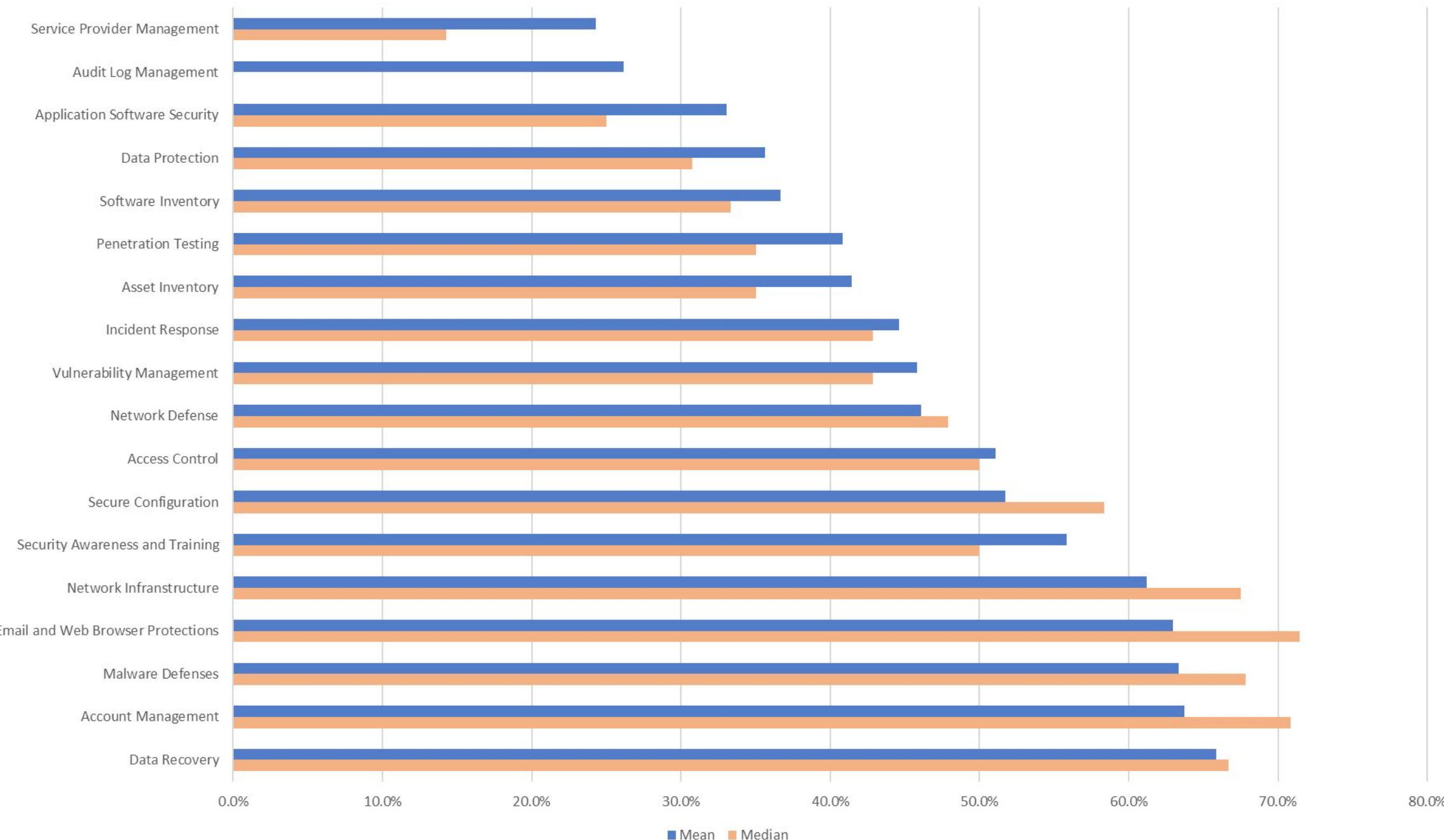
- Based on NIST Cyber Security Framework (CSF) & Center for Internet Security (CIS) controls
- Two webinars and nine Q&A sessions help to support
- Submission deadline September 30, 2022
- 71 / 73 districts responded on time

# Self-Assessment Preliminary Observations

## Early Observations:

- System needs SOC monitoring / response
- 85% of respondents requested pentesting / security review
- Third-party risk management support needed
- There is not strong correlation of scoring based on budget / size / etc.

# Result by CIS Category





# Bi-Annual Remediation Report

Will be sent out via C1Risk (the same tool used for self-assessment)

Timeline:

- Released November 28 (Monday after Thanksgiving)
- Due January 15, 2023



# Remediation Report Support

- Two webinars to explain the process:
  - 11/22 @ 1:00 PM - 2:00 PM
  - 11/28 @ 11:00 AM - 12:00 PM
- Open office hours / Q&A sessions for support:
  - 11/29 @ 2:30 PM - 3:30 PM
  - 12/14 @ 9:00 AM - 9:30 AM
  - 1/3 @ 2:30 PM - 3:00 PM
  - 1/9 @ 1:30 PM - 2:00 PM



# Triennial Security Review & Pentesting

## Status:

- Pilot colleges scheduled for October.
- Currently scheduling in November/December.
- Considering expanding capacity given the very high demand for services

# Triennial Security Review & Pentesting

## Security Review:

- Informed by the self-assessment
- Understanding and implementation of each of the 18 CIS Control families
- The level of agreement between the controls and the actual procedure and practices of the college IT Team
- A deeper dive into the Data Protection, Data Backup, and Incident response controls
- An examination of processes that might be unique to the college

# Triennial Security Review & Pentesting

## Penetration Testing:

- Threat Actor
  - Organized Crime
- Primary Attacks of Concern
  - Ransomware
  - Information Theft



# Triennial Security Review & Pentesting

- Sample engagement schedule:
  - Phase 1 - Onboarding
    - Kick off meeting, documentation request
  - Phase 2 - Testing
    - External / Internal penetration testing
    - Interviews, document reviews, and controls observation
  - Phase 3 - Reporting and concluding
    - Production of report and recommendations
    - Delivery and exit meeting
- Estimated 2 weeks per phase, with multi-college districts having a longer testing phase



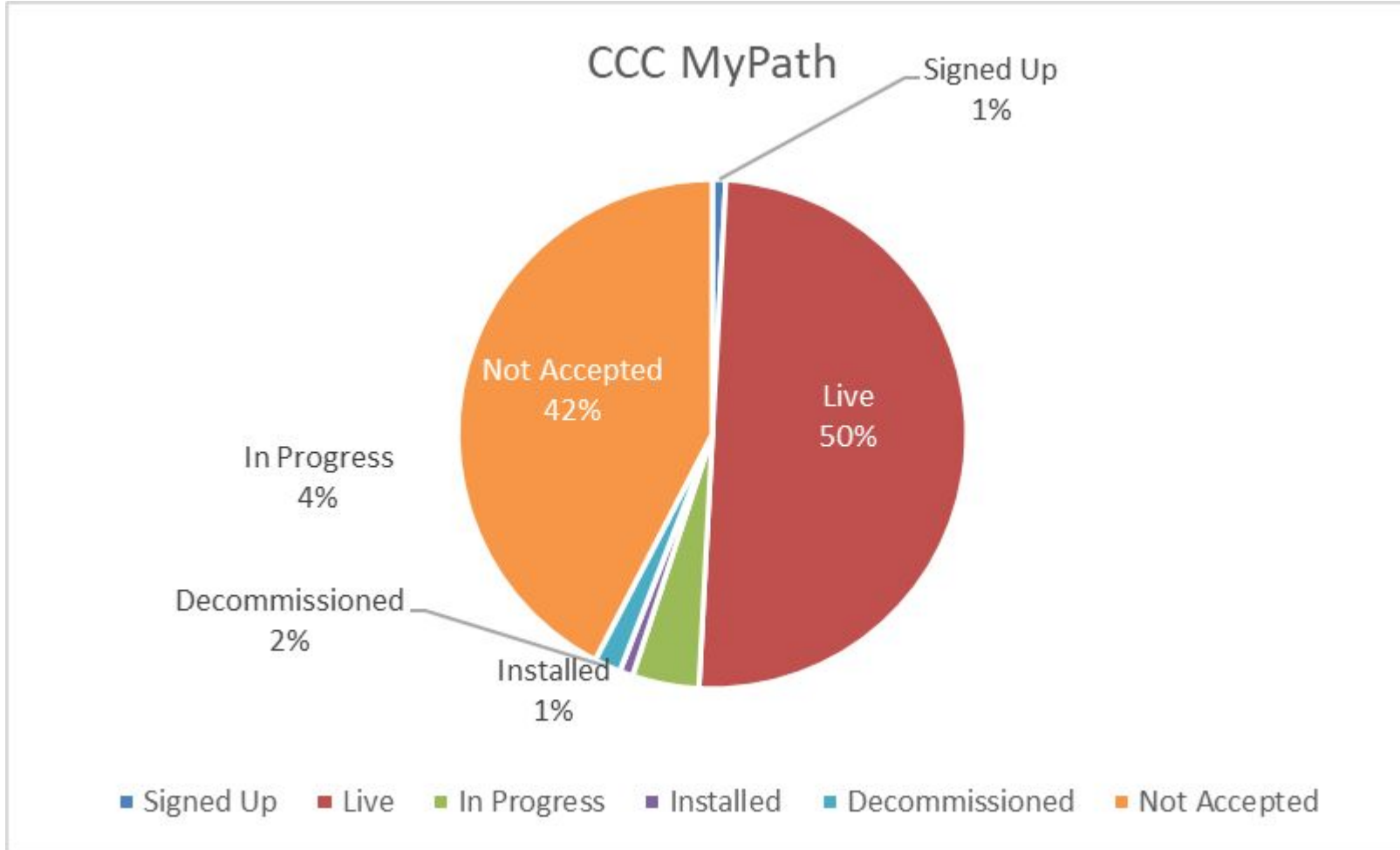
# Assessing Systemwide Tool Investment: MyPath

# Chancellor's Office Reviewing Tool Usage

- Data on implementation and usage is inconsistent across products, tools and services (i.e., institution-level adoption does not equate to student usage)
- Lack of attention toward whether student-facing tools actually improve student outcomes
- Need to prioritize systemwide investments to reduce the chaos colleges and districts feel around technology implementation
- Need input on when/how to consider decommissioning or not expanding various products



# MyPath Adoption Statistics

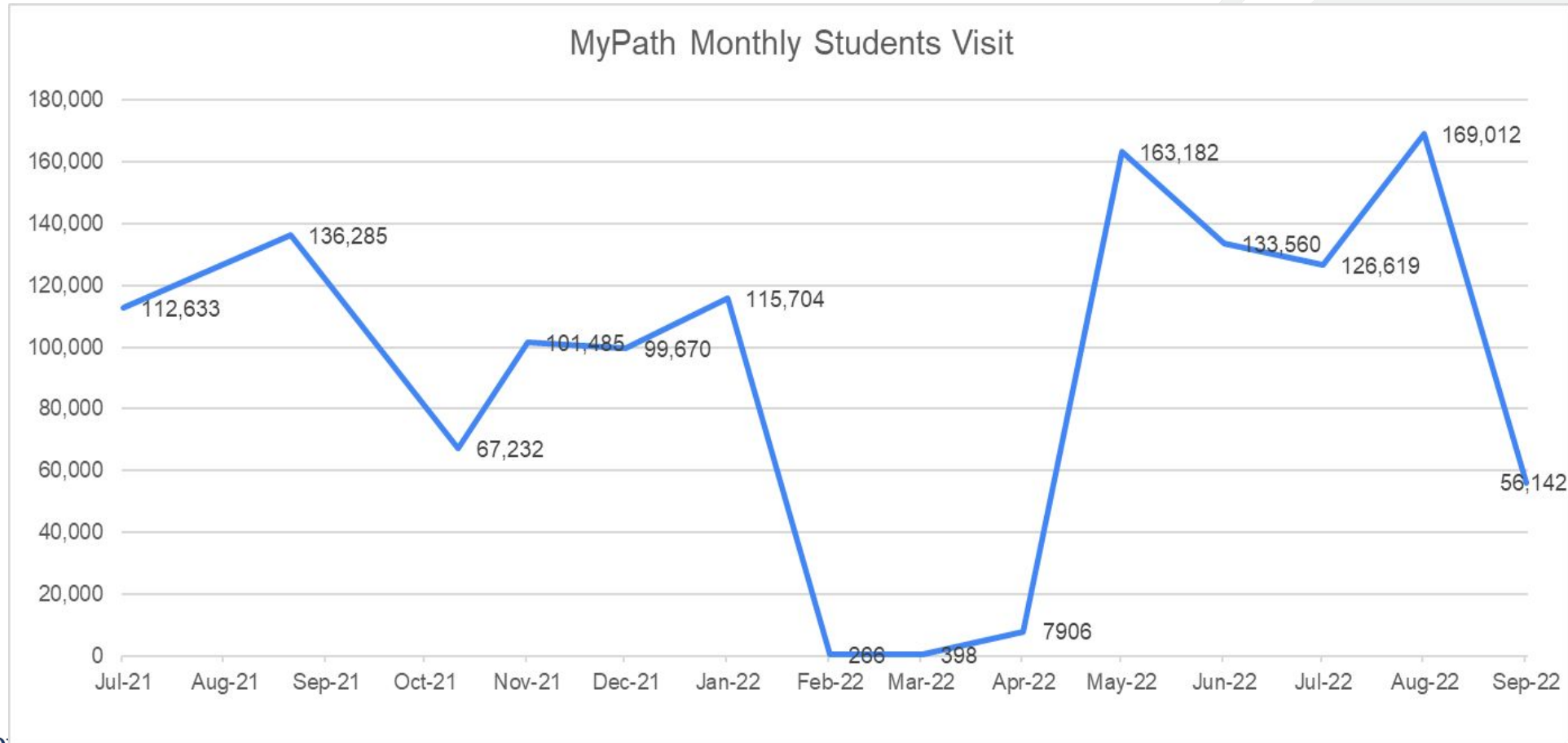


## Newest Adopters

- Chaffey College
- El Camino College
- Moorpark College
- Oxnard College
- San Joaquin Delta College
- Ventura College

# MyPath Student Usage Metrics (across 57 colleges)

This graph shows no of user clicks to MyPath month over month. Working to understand “uniqueness” with Tech Center.



# Discussion

- Given this year's priorities from Chancellor's office, redesign of CCCApply, and lack of a positive correlation between colleges using MyPath to enrollment trends, does it make sense to continue developing and expanding MyPath?
- What questions would you want more information about to make sense of what's been shared on the previous two slides?
- What criteria would be relevant to consider decommissioning? (Relevant for MyPath and/or other low adoption/usage tools in the EdTech portfolio)



# Common, Systemwide ERP

# What problems can be solved with Common ERP

- Local implementation with limited or no oversight of System and ERP Software
- Resource capacity and budget constraints
- Lack of Common Data Dictionary, causing inconsistent and many times delay in MIS reporting
- Time consuming manual process to correct data
- Missing Data validation at the source systems
- Missing Data governance and control process
- Lack of Enterprise strategy around overall ERP impacting Students and Field Staff members

# Long-Term Goal(s)/Objective(s) of Common ERP

## Objective(s)

- Systemwide adoption, unified solution for all colleges, small and big.
- Removes the work load from local colleges to manage a stand-alone ERP implementation
- Centralized governance and release cycles
- Eliminate multiple interpretations of Data and validation issues for MIS reporting
- Reduced operational cost and resource(s)
- Allow IT staff and faculty to work on strategic work with focus on Vision for Success

# Proposal for Common ERP: Option 1

Option 1: Use a vendor hosted SaaS product (Software as a Service). All 73 districts and 116 colleges can leverage the same product across the state, supported by the agency.

## Pro(s):

- Systemwide solution removes local challenges to maintain and operate
- Higher Security and fraud mitigation
- Reduced Risk and cost
- Quality MIS reporting

## Con(s):

- Requires detailed impact assessment from the field to move to a single instance
- Significant change management and process changes needs to be communicated and documented to the IT Staff as well as to the students
- Requires significant work at project level to carry the integration and re-implementation



# Proposal for Common ERP: Option 2

Option 2: Local ERP Cloud product. Districts can have locally managed ERP System, (recommend to move in Cloud environment). All the local implementation uses a commonly defined Data Dictionary and Common Data model defined at the System level

## Pro(s):

- Systemwide common data model supports the colleges to remove / minimize the data validation failures
- Data Governance in place from the agency, reduces manual processes significantly with alignment to a central data model
- Allows the districts to align to their unique business problems
- Improved MIS reporting

## Con(s):

- Maintenance and Operational support will need to be managed locally
- Requires some work at project level to align to the new common data mode and System integration

# Common, Systemwide ERP

The Huron report was shared out to TTAC members in January 2022. The Chancellor's Office received relatively few responses about the value. Please share:

- How do you see this report supporting the systemwide conversation related to a common, systemwide ERP? How about the statewide advocacy around this topic?
- Is there anything about this report that could undermine the system or state-level conversation related to a common, systemwide ERP?



# Other Topics

# Current MIS Challenges

- Missing timely submissions from districts
- Intensive manual work required locally
- Policy and process documentation is hard to follow, out of context for colleges
- Persistent local capacity issues
- Inadequate documentation for knowledge transfer between IT Staff members

**So what, if anything, is needed to address these challenges?**

# Common Course Numbering (CCN) Task Force

- First meeting was recently held and discussion surfaced around technology that could make CCN implementation easier
- There was a suggestion to consider an integrated platform (i.e., for curriculum and course catalogs to support implementation
- Does it make sense for the Chancellor's Office to conduct an inventory of technology used for curriculum and course catalogs now?
  - If so, which stakeholder groups would be best equipped to respond?

# Vendor Management

Given recent issues with Oracle Java:

- Are there other products or vendors for which the Chancellor's Office should be playing a larger role?
- Are there other vendors and products for which a systemwide contract through CollegeBuys would be helpful?



# EdTech Grants Retrospective



# EdTech Grants

The EdTech Portfolio was developed in order to:

- Support system wide technology initiatives while developing programmatic standards, identifying economies of scale and delivering consistent results
- Extend Chancellor's Office capacity to manage technology through use of Prop 98 funding

# Current EdTech Grant Portfolio

Shared Infrastructure Program	Core Applications	Data Services Program 1	Data Services Program 2	Data Services Program 3	Data Science Tools	CVC
CENIC	CCCApply	Data Lake	CalPass+	Data management	LaunchBoard	Course Exchange
Accessibility Center	MyPath	Data Warehouse		Security	Professional Development	Programs and services
High Tech Center	e-transcript	MDM			Research & data analysis	Marketing and operations
OpenCCC	C-ID	User admin/training				
Systemwide Technology Platform	COCI					
Technology governance	SuperGlue					

# Challenges with Current Approach

- Organization and logic (e.g., why are OpenCCC and CCCApply on separate grants?)
- Unclear system and local roles around fraud monitoring and systemwide security
- Inconsistent approach to scope definition and management across grants
- Systemwide oversight and management approach not commensurate with grant complexity and growth

# Proposed EdTech Portfolio Organization FY23+

Student Enrollment	Course Exchange	Security	Data Management	Metrics	Systemwide Infrastructure	Support Services
OpenCCC	Course Exchange	Security Ops Center	Data Lake	LaunchBoard	CENIC	Zoom
CCCApply	Governance		Data Warehouse	CalPass+	Libraries/LSP	3C Media
MyPath			Enterprise Data Strategy		Technology governance	Online Teaching Conference
E-transcript			Master Data Management		C-ID	
			Fraud Monitoring		COCI	
					Accessibility Center	
					SuperGlue	
					HelpDesk	



Wrap Up

# Wrap-up

## Looking forward

- Next SAC meeting to be held December 15th from 1:30-3pm
  - Additional security updates, including SOC
  - Guidance on patching and software updates
  - Support ERP vendor engagement
- TAP team to revisit today's agenda and feedback
- Chancellor's Office to put out EdTech Grants



California  
Community  
Colleges

Thank you!

[www.cccco.edu](http://www.cccco.edu)