



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

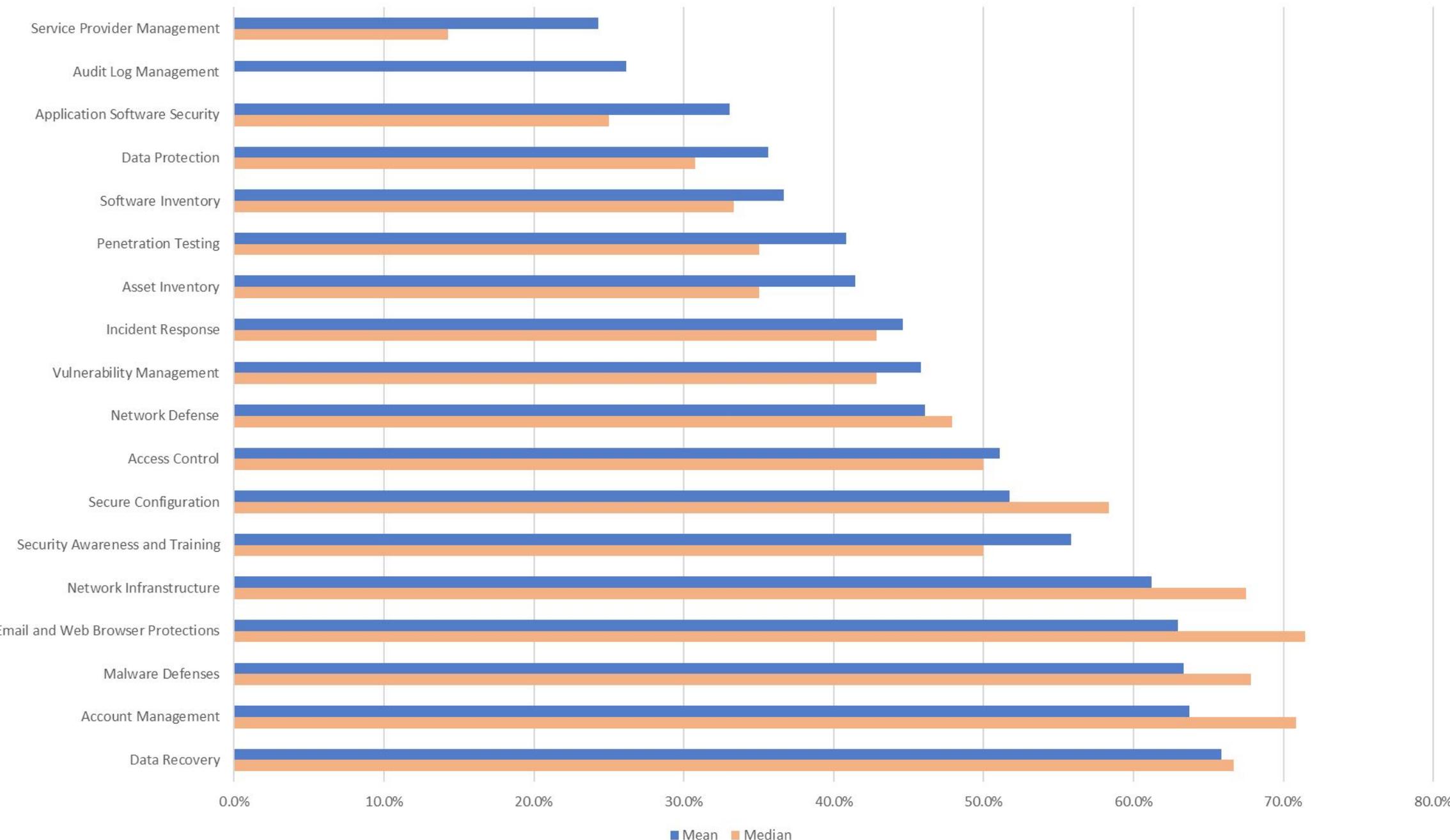
- Based on NIST Cyber Security Framework (CSF) & Center for Internet Security (CIS) controls
- Two webinars and nine Q&A sessions help to support
- Submission deadline September 30, 2022
- 71 / 73 districts responded on time

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

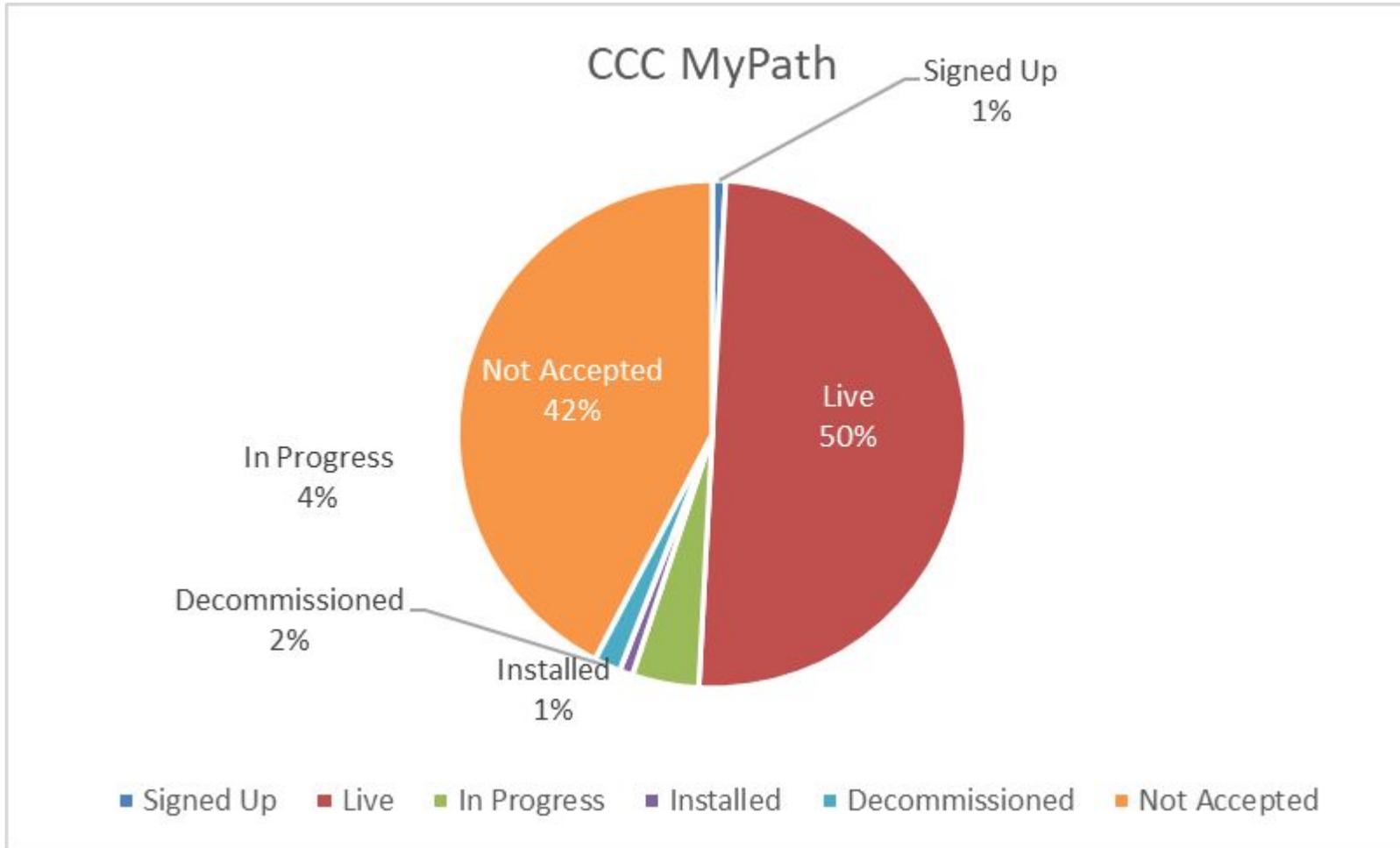


Assessing Systemwide Tool Investment: MyPath

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

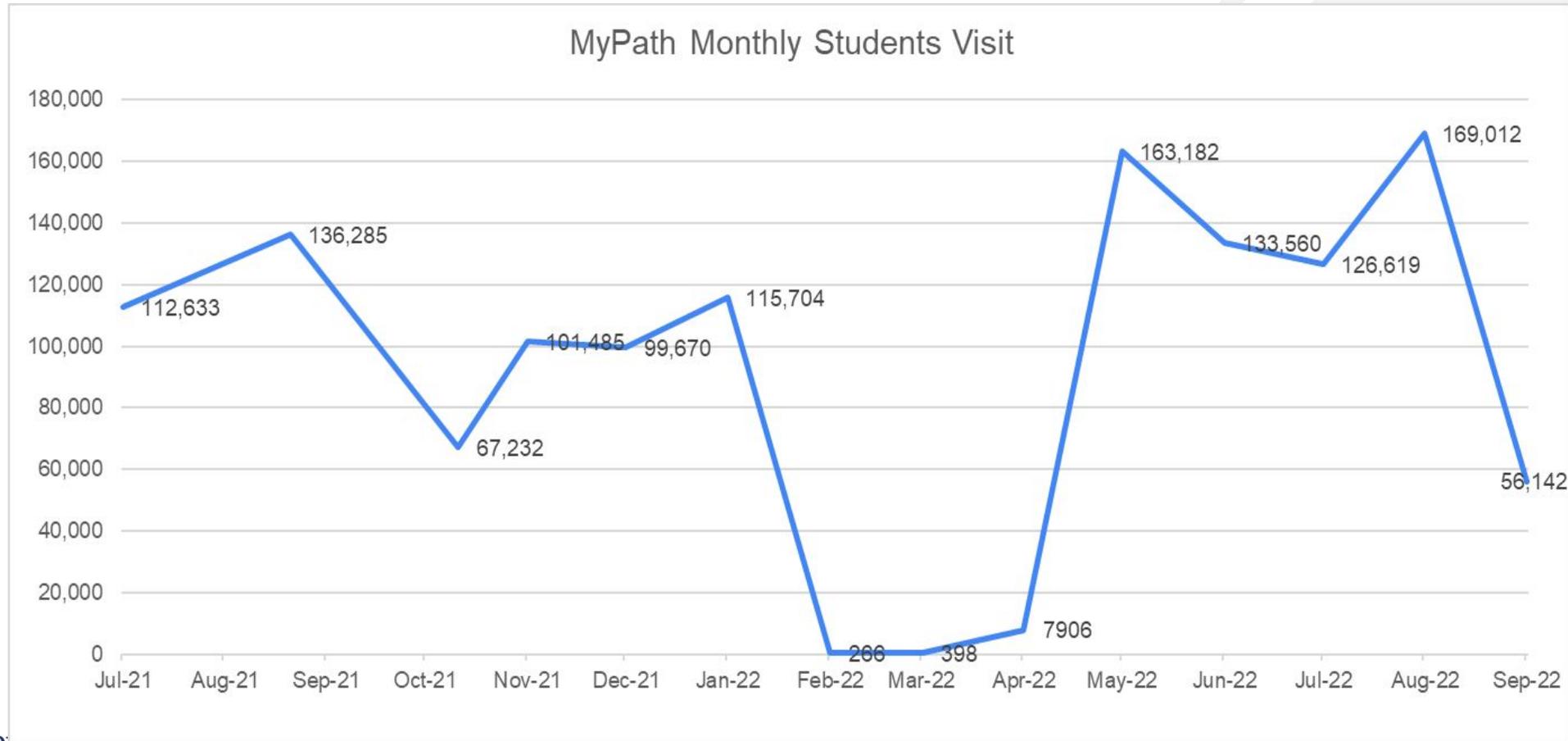


Newest Adopters

- 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	

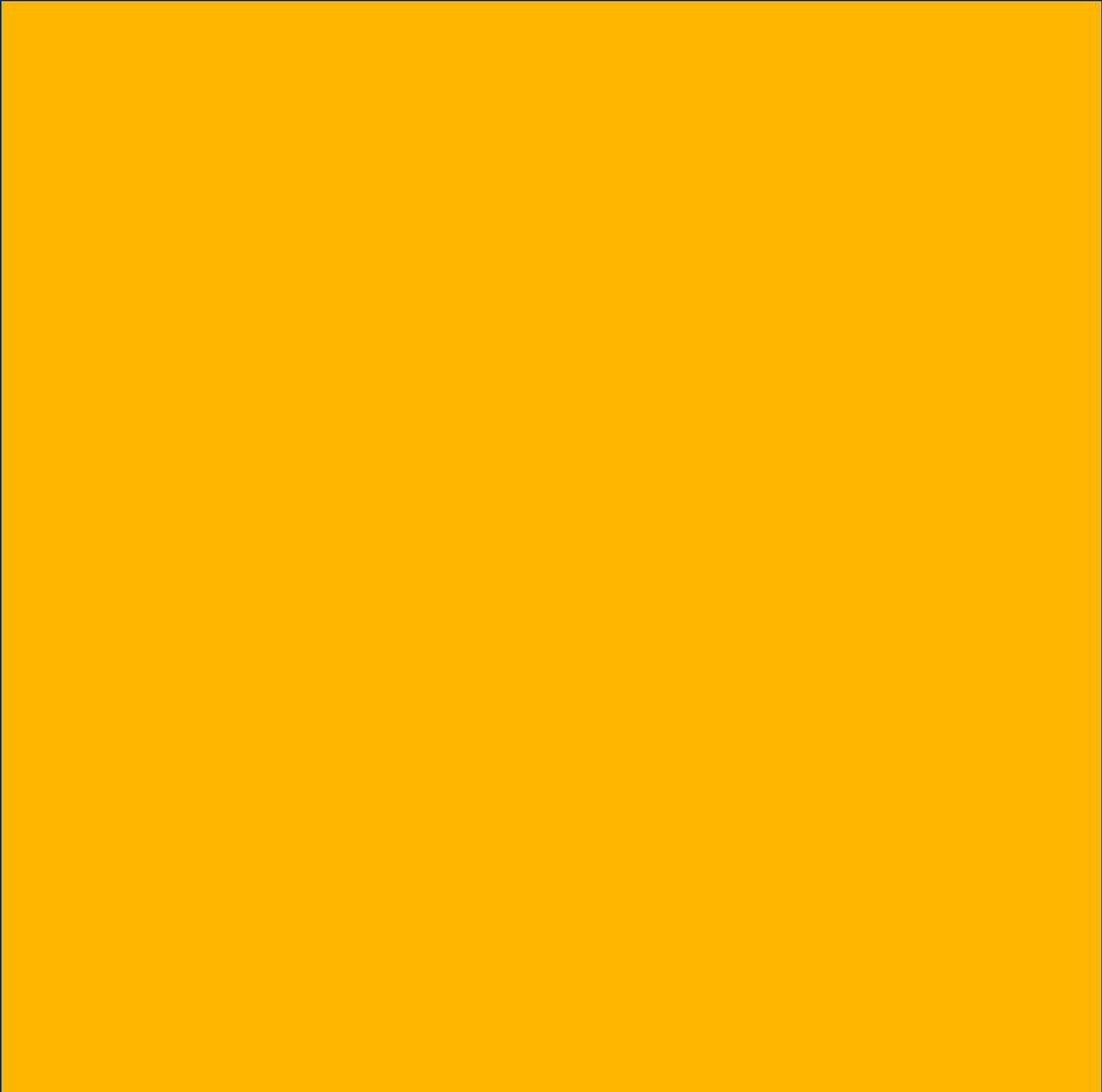


Wrap Up

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



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Thank you!

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