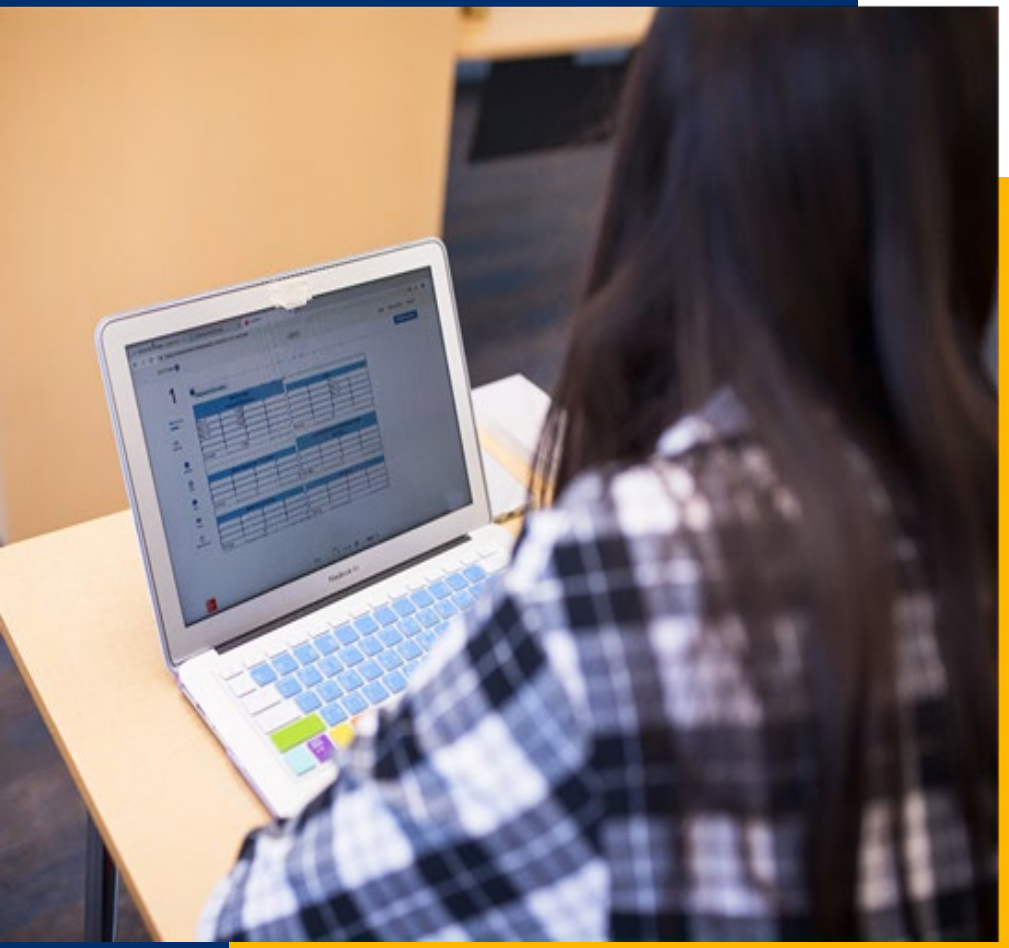

California Community Colleges

Telecommunications and Technology Advisory Committee (TTAC)

Summer Hybrid Meeting

July 26, 2023

Agenda

- System Technology Support
- FY22 Recap
- CCCApply
- Fraud Mitigation
- Common ERP
- Course Exchange

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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.

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Meeting Goals

- Share systemwide technology work and priorities
- Engage TTAC members and key technology stakeholders for input/feedback
- Begin reset of TTAC expectations around purpose and engagement
- Serve as a dry run for better (annual) onboarding about the EdTech portfolio and system technology support
- Inform feasibility and interest in longer meetings (virtual, hybrid or in-person)

System-level Technology Support

Ed Tech Portfolio: **Overview**

- To support systemwide technology initiatives while developing programmatic standards, identifying economies of scale and delivering consistent results

- To extend Chancellor's Office capacity to manage technology through use of Prop 98 funding, including:
  - Development, maintenance and operations
  - Project and portfolio management
  - Systemwide technology-related communication

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Ed Tech Portfolio: **Overview**

- Historically, the portfolio has been organized into a series of grants, fiscal agencies and contracts, with the majority of work occurring out of:
  - Butte-Glenn CCD (Technology Center and Accessibility Center)
  - Palomar CCD (TechConnect)
  - Foothill-DeAnza (California Virtual Campus and Course Exchange)

- The portfolio also includes multiple projects managed by the Digital Innovation and Infrastructure (DII) Division, like NOVA, a grant management technology platform that is increasingly used across the agency

Ed Tech Portfolio: **Why**

Allows the Chancellor's Office to:

- Ensure common technology resources are widely and commonly used
- Facilitate economies of scale around technology procurement
- Remove siloed technology investments
- Provide an overarching framework

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Ed Tech Portfolio: **Goals**

Alignment in order to:

- Prioritize technology-related experiences for students
- Increase system efficiency at the direction of the Chancellor's Office
- Bring consistency to stakeholder initiatives
- Leverage systemwide buying power

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Ed Tech Portfolio: **Key Grants**

Student Enrollment: OpenCCC, CCCApply, MyPath, eTranscript, MMPS (2025)

Course Exchange: Course Exchange implementation, Consortium, and contract support for Canvas, Studio, and Impact (2026)

Data Management: Data Lake and Data Warehouse (2024)

Systemwide Infrastructure: CENIC, systemwide technology governance, Accessibility Center, SuperGlue, C-ID, COCI, Library Database subscription (2025)

Support Services: Zoom, 3C Media, Online Teaching Conference (2028)

TTAC: **Charge**

From the 2022 Participatory Governance Handbook:

- The TTAC advises the Chancellor's Office on the continued development and deployment of education technologies serving the students, faculty and administrators of the California Community Colleges.
- The group advises the Digital Innovation and Infrastructure Division on the Chancellor's Office strategies and upcoming initiatives related to technology, and provides a "voice from the field," as well as a mechanism for the Chancellor's Office to disseminate ideas and strategies but also to obtain immediate feedback on data and technology strategies, initiatives, and services.

TTAC: **Member Roles & Expectations**

- Roles and Responsibilities
  - Provide insights and guidance on systemwide technology vision and investments
  - Periodic (at least annual) review of the systemwide technology roadmap
  - Identify issues and challenges with implementation and system-level support needed
- Engagement Guidelines
  - Consistent attendance and active participation for representative group(s)
  - Review of prepared meeting materials prior to, during and after meetings
  - Regular share out of information learned to relevant constituency group(s)

TTAC: **Chancellor's Office Roles & Expectations**

- Roles and Responsibilities
  - Facilitate active engagement and inclusive participation
  - Ensure materials are prepared in a timely manner before and after meetings, with Tech Center Project Management support
  - Provide transparency on decision-making related to technology decision-making
- Engagement Guidelines
  - Listen actively
  - Communicate, communicate, communicate

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System Technology Procurement Support

- Systemwide investment in technology (e.g., Canvas, Libraries, Microsoft A5 licenses) helps alleviate pressure on colleges and districts while also providing highly mobile students with consistent access to specific tools/supports.
- CollegeBuys, STAC and STARTE help facilitate the procurement process for local technology (and other) purchases

(Partial) FY22-23 Recap

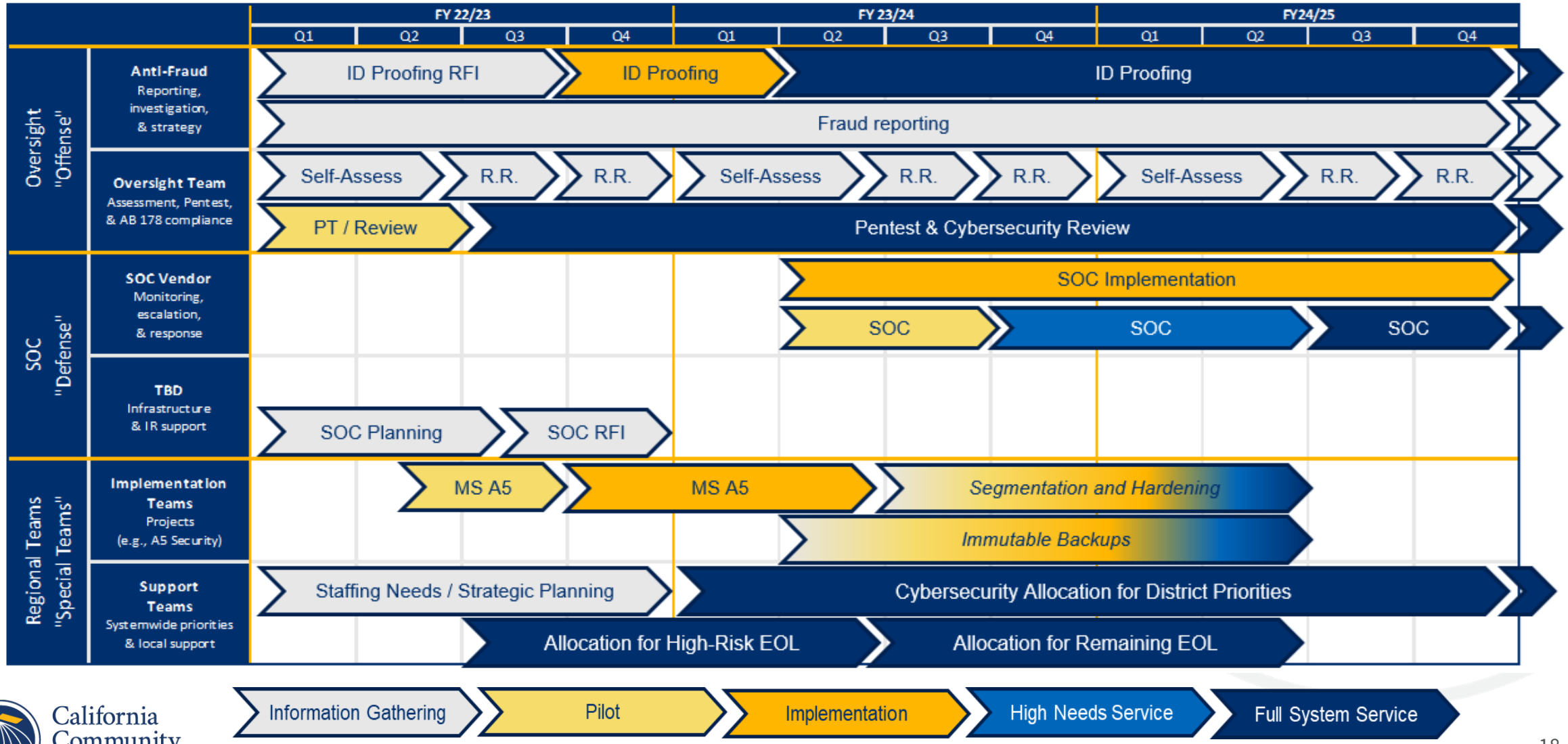
Key FY22 Accomplishments: InfoSec

- All districts completed the Cybersecurity Self-Assessment
- 71 of 73 districts January 2023 Remediation Report
- 68 of 73 districts June 2023 Remediation Report
- 48 of 73 districts reported fraud 10+ of 12 months
- Microsoft A5 Security Suite license purchased for all districts.
- Implementation contracts secured for HIGH needs districts.
- Funding guidance to eliminate high-risk End-of-Life Software.
- 62 of 73 districts penetration test / cybersecurity review by December 2023.

FY23 InfoSec Priorities

- EOL mostly eliminated by December 2024.
- Logging and monitoring at all HIGH need districts by December 2024 (SOC implementation).
- Immutable backups implemented.
- Student networks segmented by December 2024.
- Windows account hardening completed by December 2024.
- GLBA compliance

3-Year Cybersecurity Roadmap



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CCCAPPLY

Reimagining the Systemwide Application

CCCApply – “A Welcoming Front Door”

The California Community Colleges Chancellor’s Office (CCCCO), in partnership with Accenture, has initiated the reimagining and development of a new student-centered application process and supporting system architecture for our prospective and returning students to improve the user experience, reduce the pressure of the application process on students, better support equitable access and protect against and mitigate fraud.

Who We Are

The CCCApply delivery team is made up of consultants from Accenture’s Education, Technology Strategy, Organizational Change, Product and Platform Engineering, and Song (Design) consulting practices. We are working in partnership with the California Community Colleges Chancellor’s Office to build on previous work.

Previous Work

2022

CCCApply Governance

The Chancellor’s Office engaged with Accenture to develop a statewide governance model and an initial application and policy review to support the reimagining of CCCApply.

2023

CCCApply Assess & Align

A continuation of the work, developing the *current state* of the standard CCCApply, aligning leaders on the direction and effort of a statewide Task Force and creating a high-level roadmap for transforming the application and engaging stakeholders across the California Community Colleges.

2024

CCCApply Reimagine

Mobilization of the statewide Task Force, a technical and functional review of CCCApply including how stakeholders interact with data, the reporting requirements and research needs, the creation of a Target State that includes prototypes, value stream mapping, technical and functional requirements gathering, a market scan of system vendors, the identification of solution alternatives and the development of a high-level solution implementation roadmap.

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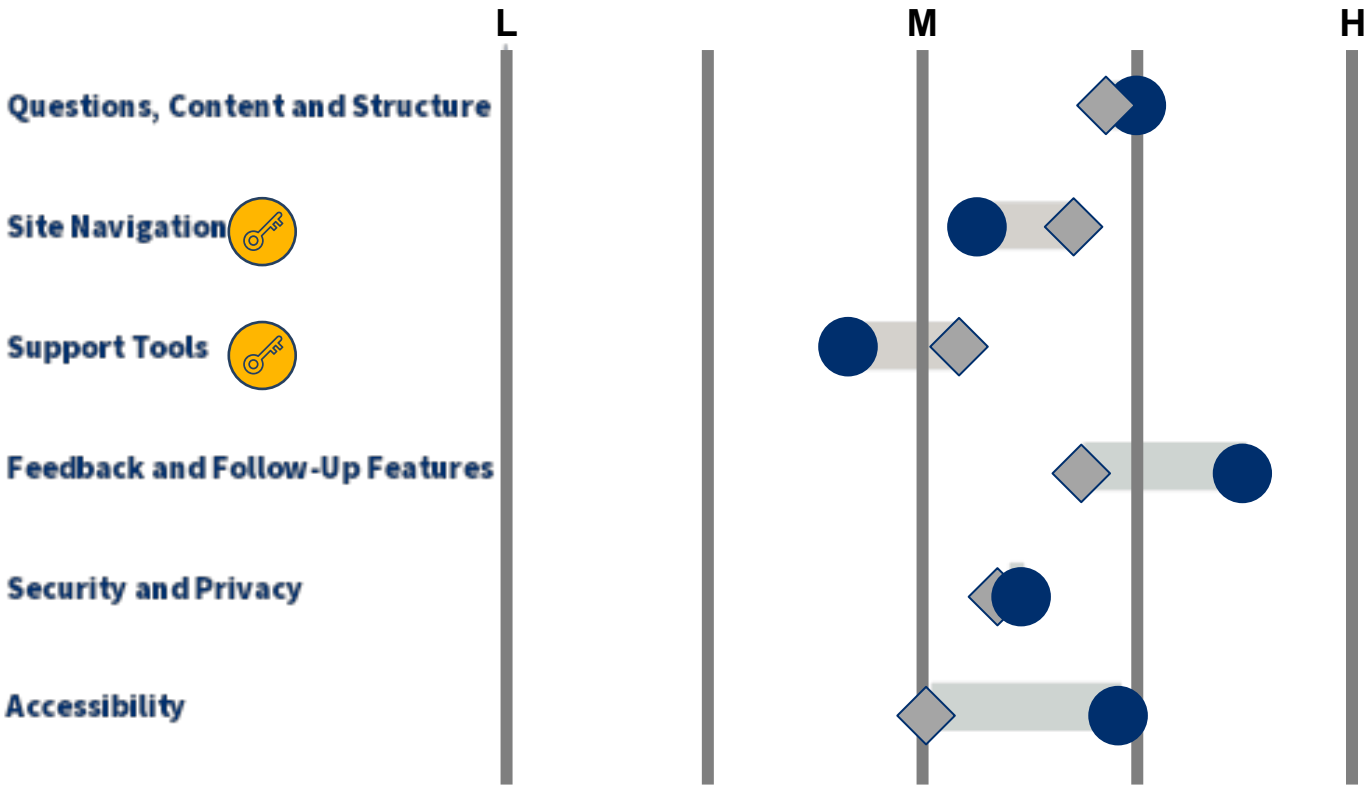
CCCApply Application System Review Results

CCCApply Comparison to Peers



Takeaways for CCCApply

1. **Performs slightly above average compared to industry peers** (6th of 13)
2. **Outperforms** peers with respect to **Feedback and Follow-Up Features and Accessibility**
3. **Underperforms** peers with respect to **Site Navigation and Support Tools**

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CCCApply Current State

Peer Average

Key capability gap identified by the Working Team

CCCApply Key Improvements (2018 – present)

Category	Summary of Improvements	# Completed
Questions, Content & Structure	Build-out of some skip-logic, re-design of specific questions, and augmentation to answer choices created more efficient flow through the application and greater inclusivity	**16**
Security and Privacy	Implementation of advanced spam filter, advanced bot detection, the student account creation and recovery security framework, and IP quality score technology augmented ability to protect against and mitigate fraud	**10**
Support Tools	Incorporation of question tool tips and the roll-out of the chat-bot support feature provided applicants with more on-demand support	**5**
User Interface	Moderate design improvements to the web and mobile interfaces increased usability and brand recognition, and mitigated some of the negative applicant experiences	**7**
Site Navigation	Streamlining of workflow at account creation and post-application submission enabled faster completion of the application and commencement of onboarding	**5**
System Infrastructure	Upgrade of the technology deployment model and implementation of a more modern technology stack reduced planned system downtime and increased system agility	**3**
Data, Reporting & Analytics	Implementation of “SuperGlue” enabled faster application processing and field access to application data	**3**

Project Accomplishments

1. **Analyzed the 'current state' of CCCApply and compared the system to 12 peer systems** from a user experience perspective and identified key challenges
2. **Documented the improvements to CCCApply since 2018**
3. **Assessed the CCCApply standard application questions** and identified improvement opportunities to reduce, reword and restructure
4. **Identified key stakeholder leaders and conducted interviews to inform statewide Task Force membership** and gather current state challenges and opportunities
5. **Facilitated 3 stakeholder alignment workshops** with the Short-term Working Group to:
    - Orient the group on the current state of CCCApply and proposed statewide Task Force structure and governance
    - Co-create the Vision and Guiding Principles for the statewide Task Force

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CCCApply Application System Key Challenges

#	Challenge	Description
1	**Long and discouraging question bank**	The **question bank is too long and contains confusing, exclusionary language**; the application **deploys minimal branching and skip logic** to reduce irrelevant questions for the applicant. Many questions also have **confusing answer choices**.
2	**Multiple sites with distinct sign-in credentials**	The **sites within the CCC system use independent sign-in credentials** and methods; **applicants must track multiple sign-in credentials across the CCC ecosystem** (CCCApply/MyPath, CCCHelp.info, individual college system sites, etc.).
3	**Distinct and redundant applications**	There are **multiple distinct applications for different applicant personas** (Standard vs. Non-Credit vs. International vs. Promise Grant), and **applicants can only apply to one college with each application**.
4	**Lack of integrated support tools**	The application system **lacks integrated support tools** (i.e., FAQs, Chatbot, Live Chat) to help the applicant navigate and complete the application successfully.
5	**Cumbersome security features**	The application's **security features** (i.e., reCAPTCHA) **are clunky, minimally effective, and create frustration** for applicants.

CCCApply Reimagine

Key project outcomes and activities our team seeks to achieve over the 11-month engagement include:

New Application Structure, Content, and Design	***Identify Solution Alternatives***	***Change Management***	***Task Force Mobilization***
▪ Documentation of full questions landscape, account creation, application security, data reporting requirements, research needs, local onboarding needs ▪ Document methods/processes colleges utilize to collect supplemental information ▪ Document SSS (1.0 & 2.0) ▪ Build proposed new application (content, design, user experience) ▪ Establish target state for the new application including business outcomes ▪ Gather functional, technical, and business process requirements ▪ New application governance model	▪ Conduct market scan of third-party solutions ▪ Synthesize solution alternatives including high-level cost/benefit analyses ▪ Present solutions and provide recommendation ▪ Develop implementation roadmap for chosen solution, including phasing dependencies, and milestones	▪ Develop Change Impact Assessment ▪ Create Change Journeys for key stakeholders ▪ Create Transformation Narrative & update Communications Plan ▪ Change Strategy – convert change journeys to key activities and communications to ensure alignment and engagement	▪ Kick-off Task Force to build shared vision, give input on specific challenges, and communicate to stakeholders ▪ Design sprints as discrete projects to gather input and 'best thinking' for recommendations ▪ Engage students in planning and prototyping of potential solutions
Document current state and design future state transformation	**Develop objective, requirements-driven recommendation**	**Introduce transformative change incrementally**	**Meaningfully involve stakeholders in the change**

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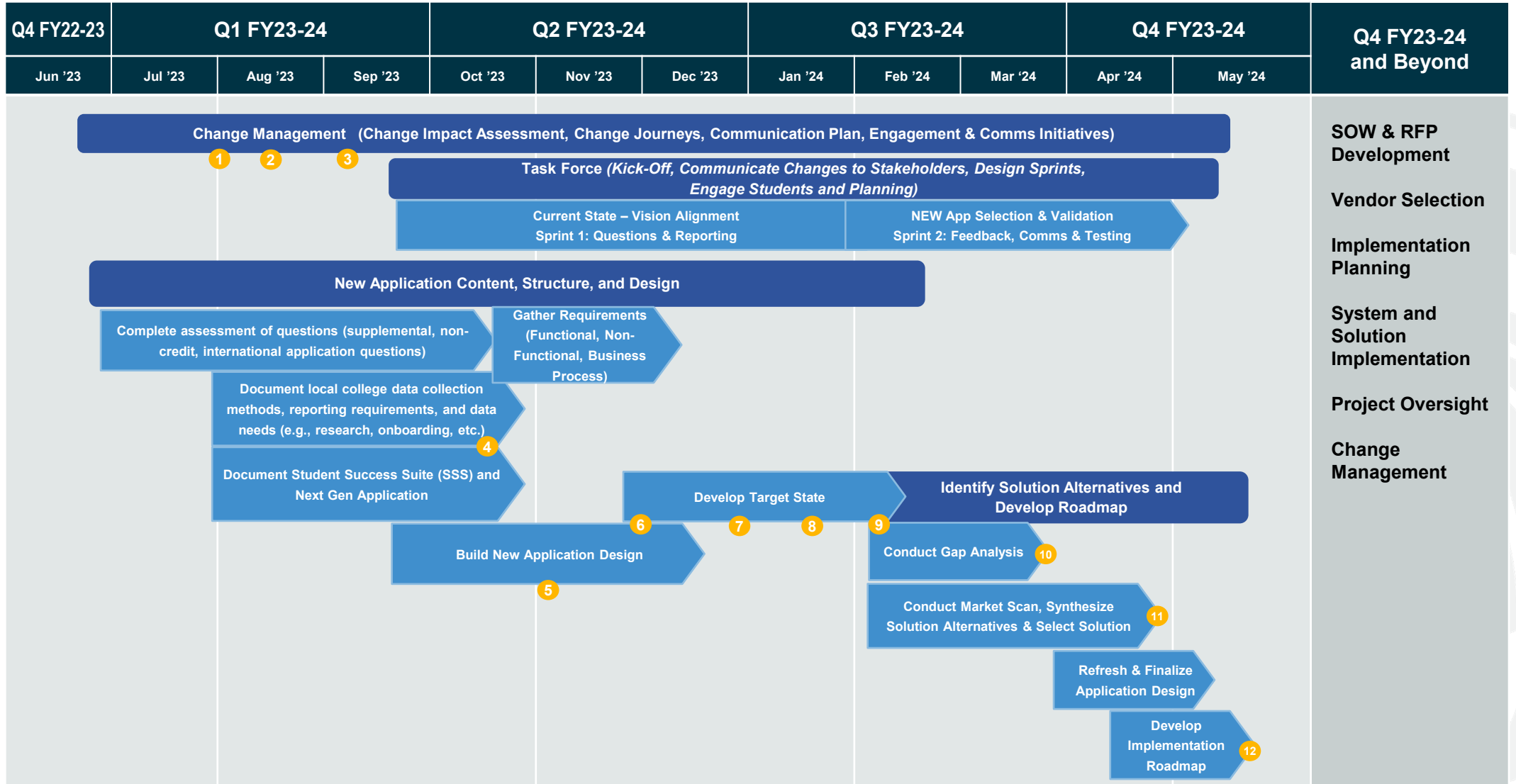

Deliverables

1. Del 1: Project Plan
2. Del 2: Change Impact Assessment
3. Del 3: Change Journeys
4. Del 4: Data Blueprint and Student Success Suite and Current State Technical Analysis Presentation and Report
5. Del 5: Target State Prototypes
6. Del 6: Target State Value Stream Maps and Capability Models
7. Del 7: Target State Functional and Technical Requirements Presentation and Report
8. Del 8: Target State Governance Model
9. Del 9: Target State Profile, Data Architecture, and System Architecture Presentation and Report
10. Del 10: Gap Analysis Presentation and Report
11. Del 11: Market Scan Research, Solution Alternatives, and ROM Pricing Presentation and Report
12. Del 12: High-level Solution Implementation Roadmap

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Immediate CCCApply Work

Given challenges with CCCApply, there is immediate work happening now:

Issue	Solution
1. Application is lengthy and complex, unnecessarily so at times 2. Significant development resources and lack of transparency around update/change process 3. Most colleges struggle with systematic fraud mitigation, primarily via identity verification	1. Revisit questions that can be cut/simplified easily, developing an advocacy strategy 2. Implement a CCCApply Update Request process 3. Implement a pilot ID verification program as soon as is reasonably possible

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Identity Verification Implementation | ID.me

TTAC July 26, 2023

Presented by:

Valerie Lundy-Wagner
Vice Chancellor
Office of Information, Data, Evidence, and Analytics
Digital Innovation and Infrastructure Division

Goal

Integrate an identity verification service into the current application workflow to reliably **confirm and protect the identity of new applicants** and **reduce application fraud** for the California Community Colleges system.

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Pilot Selection Process

RFI process managed by the Chancellor's Office team (ESLEI and IDEA Offices) with critical input from colleges (Hartnell, Kern, LA, and Riverside CCD), including information technology, financial aid, student services staff/administrators, and technical security experts.

Six vendor submissions were reviewed by the General and Technical RFI Committees, which included local and system-level representation.

ID.me selected as a ***short-term solution*** because:

- Shortest implementation time of all products evaluated
- 24/7 support for students during the identity verification process
- NIST 800-63A compliant

ID.me was a near-unanimous recommendation of both the General and Technical RFI committees.

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Benefits

Integrating identity verification will enhance security and trust in the admissions process by:

- Providing **a trusted pathway for students to securely verify their identity** in accordance with federal standards, including for account recovery
- **Reducing the manual workload for colleges** who are investigating and attempting to identify potential fraud
- Allowing college staff and faculty to **focus on those who cannot use identity proofing**: including AB540, incarcerated, and/or minor students, as well as fraudsters trying to enter the system

Benefits (continued)

- Helping **prevent** bad actors from remotely exploiting the admissions process in **a scalable way** and apply for financial aid using a student's identity

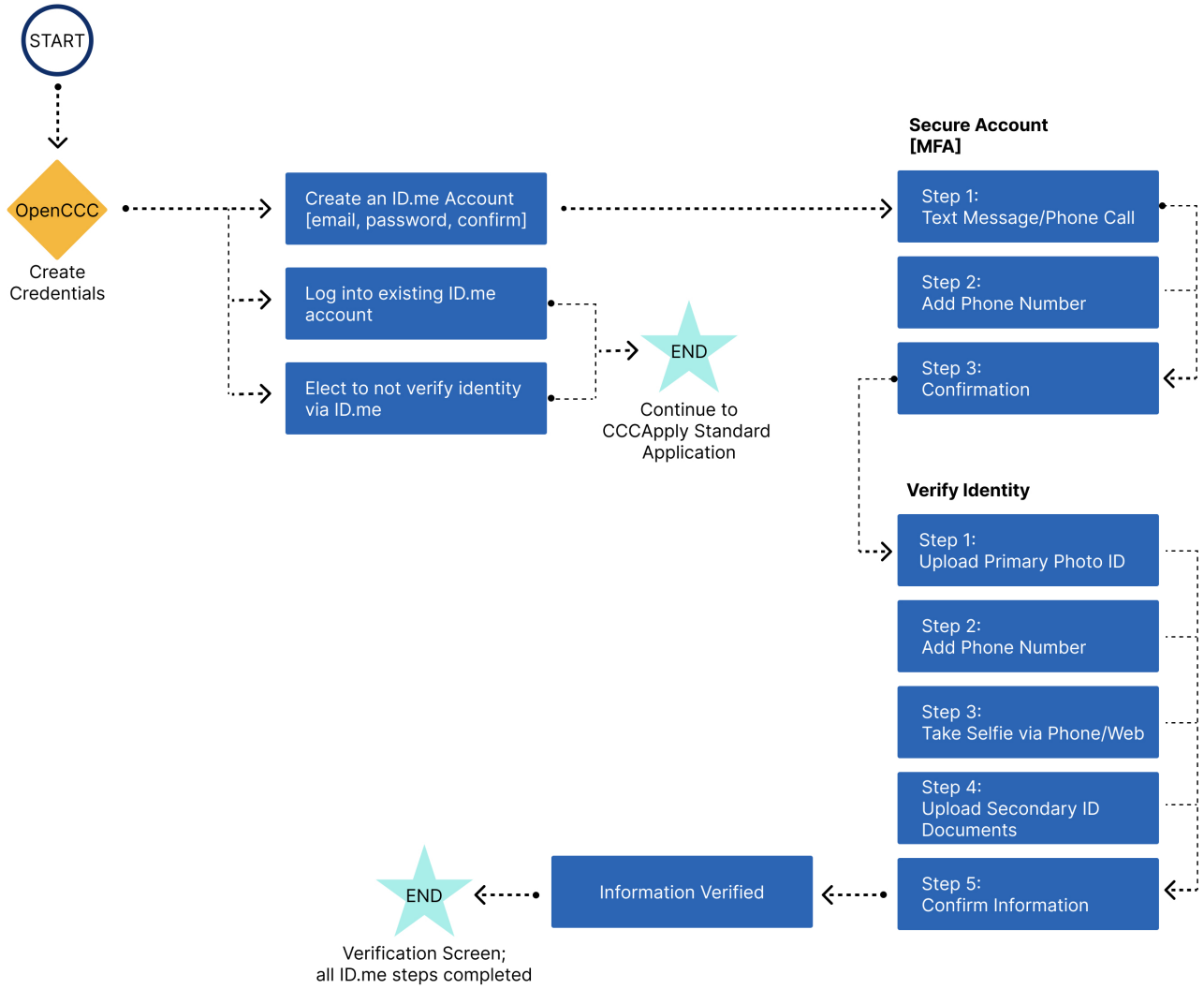
- Adopting the **same technology** for identity verification and reducing fraud **as 37 State Agencies** and 15 Federal Agencies
  - **Note:** *ID.me is in use across other CA state systems. Over 8 million Californians already have a verified ID.me account. Account holders need only to log in to their existing ID.me account for application verification.*

How it Works

Students will be prompted to verify their identity by entering information and uploading documents.

Students will be guided through **a simple series of ID.me screens** as part of the CCCApply standard application process workflow immediately **after they create their system credentials** via OpenCCC.

Student User Flow - Unsupervised Remote



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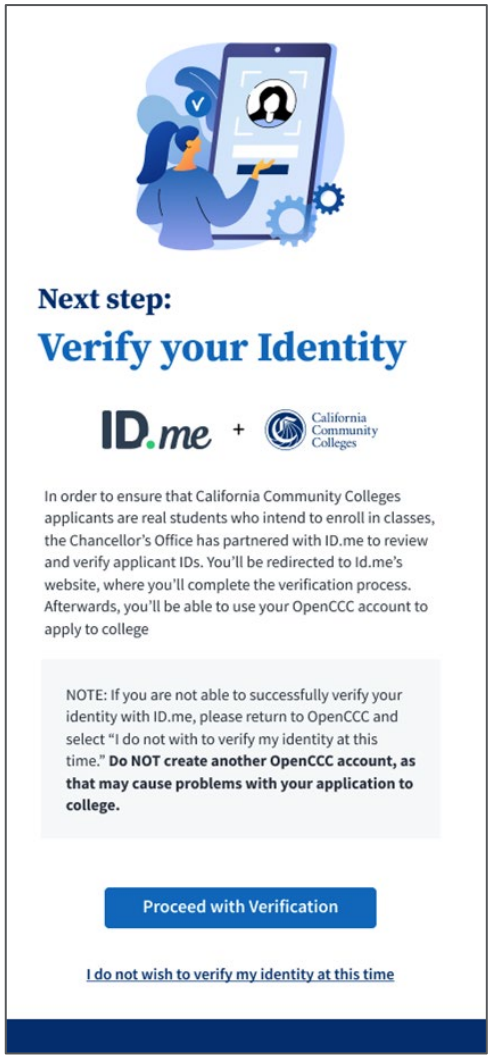
ID.me Landing Page from OpenCCC



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Note: language is placeholder

ID Verification Options

Existing ID.me Account →
Student uses multi-factor authentication prompting them to log into ID.me.

Previous ID.me users can simply log into ID.me for verification.

Takes less than two minutes if they've forgotten their password.

ID.me Remote Verification →
Student verifies their identity digitally by uploading documents to ID.me.

Self-service, digital route by uploading images/videos/scans of their documentation.

Takes less than 6 minutes in ID.me.

Unverified →
Student elects not to verify their identity via ID.me

Applicants can choose to bypass ID proofing and continue straight to the application.

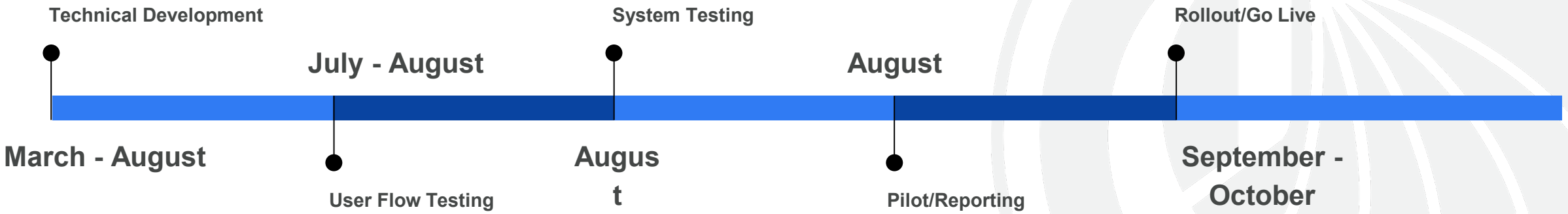
Fewer applications should reach the college staff for manual verification. Those that do should be the highest priority, either because they cannot prove their identity or because they are suspected of being fraudulent.

Local Add-on Options for Verification

The Chancellor's Office, in partnership with CollegeBuys, is working to ensure colleges/districts can purchase support packages for purchase:

- Training for college/district staff to become verified ID.me referees to provide applicants with **in-person support on campus**
- Student access to UPS and other kiosks with verified ID.me referees to provide applicants an **off-campus but in-person support for ID verification**
- Contract with verified ID.me referees to support **in-person events** (e.g., enrollment days)

Implementation Timeline



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CCC COMMON ERP PROJECT

Laying the Cornerstones for Systemwide Digital Transformation

Context – Common ERP

The Chancellor's Office is in the process of understanding the need for a common ERP platform to reduce the local burden on the California Community Colleges faculty, staff, and students. A Common ERP solution will help the organization manage key activities in Finance, HR, and Student Information Systems.

Who We Are

The Common ERP delivery team is made up of consultants from Accenture's Education, Technology Strategy, and Organizational Change consulting practices. We are working in partnership with the California Community Colleges Chancellor's Office to build on previous work to build a complete understanding of the Colleges ERP needs, current challenges, opportunities, and requirements to inform an adoption of a Common ERP solution.

Questions We Seek to Answer

How might we engage our ***people*** to develop a shared vision for success through identification of challenges as and opportunities?

How might we optimize ***processes and workflows*** to find value across Districts and Colleges?

How might we align on a standard ***technology*** to enable efficient processes?

How might we address prevalent issues on ***data collection, standardization, and reporting***?

What ***solution requirements are necessary*** for the Districts to include in the Common ERP solution?

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Previous Work Completed

Several initiatives have been completed around the Common ERP in recent years.

2019 | 2021 | 2022 | 2023 | 2024

4CIS

A 2019 case study made by 4CIS[1] around moving the Colleges to a shared cloud solution where Banner is the recommended solution.

Considerations:
- Focus on Districts that were on Banner

Huron Report

The Chancellor's Office engaged with Huron Consulting group to explore the impacts of implementing a common ERP platform across the California Community Colleges.

Considerations:
- Only 8 schools were consulted, limited current state findings

Accenture Case for Change

Between Nov '22 and Feb '23, Accenture conducted interviews representing 45% of the Districts to establish the Case for Change which sought to highlight the needs and challenges (e.g., manually intensive work, inconsistent management of data, security vulnerabilities, hiring/retention challenges) the System is facing with their current ERP platform and what might be possible through a common systemwide ERP solution.

Considerations:
- Limited understanding of ERP workflows and processes

Accenture Common ERP Solution

In June '23, the Accenture team was engaged to support the Chancellor's office to create a comprehensive current state landscape and analysis of the ERP systems across the Colleges, develop a target state solution that creates systemwide standardization and integration, and gather requirements for this common ERP solution. In designing the common ERP solution, the Accenture delivery team will also support the Chancellor's Office in a market scan of ERP technology vendors.

*California Community Colleges Cohort Information Systems

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Common ERP Project Overview and Scope

In this phase of work, we will be supporting the Chancellor's Office in a 14-month engagement where we will conduct a current state assessment of the California Community Colleges ERP landscape, propose a Transformation Governance model, create a target state profile and roadmap of the ERP solution, gather requirements for the Common ERP solution, and support the client in a market scan where we evaluate vendors.

Align on Transformational Governance Model

Develop a governance model and structure for a Common ERP transformation for the Colleges

Understand the Current State ERP landscape of the Colleges

Understand the current state of the Colleges from a people, process, technology, data, and experience lens to inform future decisions*

Co-Create Common ERP Target State Profile with Stakeholders

Define the target state and align on what goals the Common ERP should accomplish with desired functionality

Gather Requirements for the Common ERP Solution

Identify/gather requirements for the new Common ERP solution (document conditions and functions that must be met) and build solution

Conduct Market Scan and Evaluate Vendors

Once solution requirements are developed, perform market research to analyze and evaluate vendors for the Chancellor's Office

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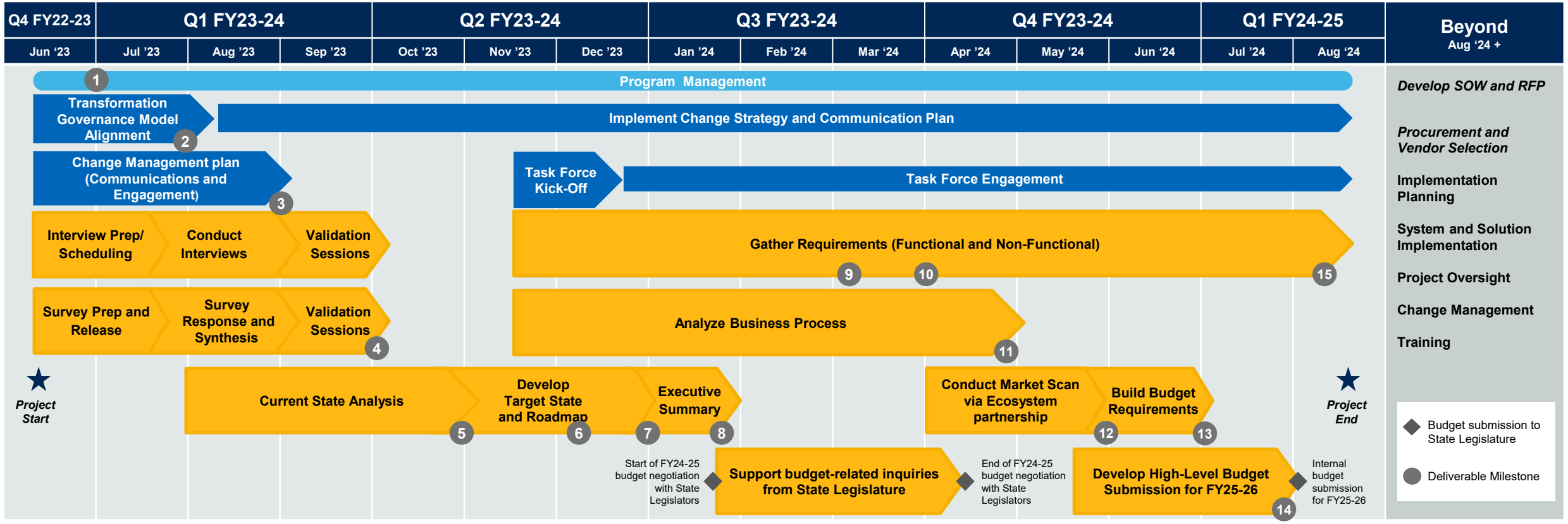
**Current State findings will stem from survey responses, data and documentation reviews, and interviews conducted across the 116 colleges from the 73 districts.*

Common ERP Project Activities and Goals

Project schedule for Common ERP Transformation will be a multi-year process from transformation governance, change management, current state analysis, gathering requirements, and market research.



1. Del 1: Project Plan
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3. Del 3: Change Management & Communication Plan
4. Del 4: Validation Session Summary Documentation
5. Del 5: Current State Documentation
6. Del 6: Stakeholder Map
7. Del 7: Target State Profile
8. Del 8: Target State Roadmap
9. Del 9: Requirements Repository
10. Del 10: Baseline Solution Requirements
11. Del 11: Business Process Analysis
12. Del 12: Market Scan Analysis
13. Del 13: Budget Requirements
14. Del 14: Internal Budget Submission for FY25-26
15. Del 15: Detailed Solution Requirements

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Wrap Up

- Action items
  - Notes and action items to be sent out
  - Send survey on preferred September meeting logistics

- Next meeting
  - Planned: Zoom, September 21, 2023

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Thank you!

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