



**CSIS**  
A FCMAT SERVICE

# Data Governance Academy

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## Session 2

### Operationalizing Data Governance With Key Documentation At Scale

#### Participant Guide

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# TABLE OF CONTENTS



# 06

Overview

---

# 16

Formal Data Management

---

# 28

Data Initiatives as Systems of Change

---

# 60

A Framework for Data Initiatives

---

# 08

Current State of Data Management

---

# 20

Data Governance

---

# 36

Choose Your Data Initiative

---

# 65

Data Initiatives Charter Template

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## About Your Facilitators

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**Matthew Clark** is the Data Governance Administrator in the CSIS Client Services Division. Matt has worked in education policy for the State of California and US Senate in Washington DC. He has taught sophomore English on the Southside of Chicago, and English as a foreign language in Kosovo and the Republic of Georgia. He has an MA from the University of Chicago and a BA from UC Berkeley.

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**Rob Canales** is the Implementation Specialist in the CSIS Client Services Division. Rob has nearly 25 years of experience working in both the business and technology sides of the house at the Kern County Superintendent of Schools Office and has most recently implemented innovative data management solutions in the public and private sectors.

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# The Data Governance Academy

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## OBJECTIVES

*After this session of the Data Governance Academy, leaders will be able to...*

- 1. Support DA Remediation** – Provide technical assistance services to districts (COEs) and help LEAs identify improvement targets and action plans.
- 2. Develop Data Initiatives** – Draft problem statements, define vision and outcomes, define scope, determine roles, deliverables and milestones.
- 3. Align Data Work With Strategic Goals** – Help other leaders connect data practices to district priorities like funding, compliance, equity, and student outcomes, making data a valuable strategic asset.
- 4. Build Local Capacity For Implementation** – Create or adopt practical tools, templates, and coaching strategies to help your LEAs launch or strengthen data governance programs that are sustainable and locally owned.
- 5. Foster A Culture Of Data Stewardship** – Promote cross-functional collaboration and shared responsibility for data quality, privacy, and use across departments and leadership.

## AGENDA

- The Current State of Data Management in California’s Education Agencies
- Formal Data Management
- Data Governance Overview
- Data Initiatives as Systems of Change
- Data Initiative Types
- A Framework for Data Initiatives
- Q&A

**What?**

**How?**

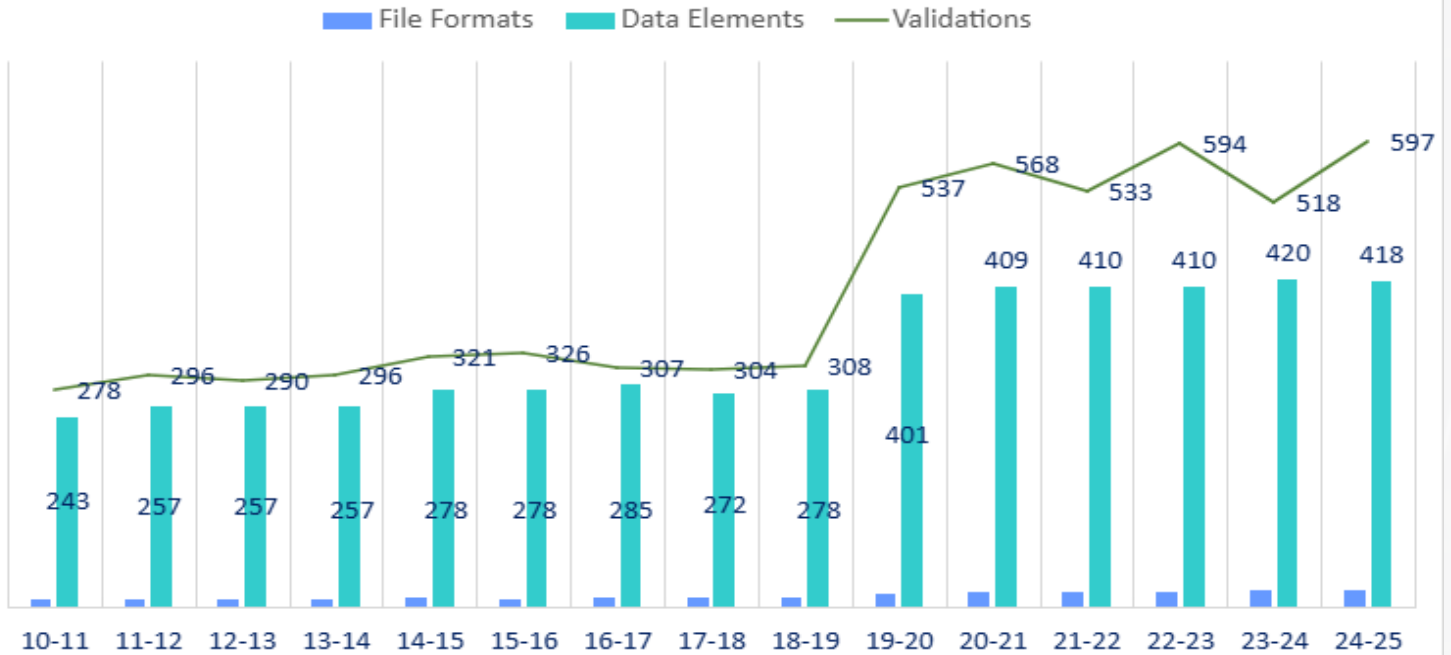
**Why?**

# Notes

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# Current State of Data Management

Growth in CALPADS Data and Implications for Data Quality



## Educational Data Systems

EDData | CALPADS (California DEPARTMENT OF EDUCATION) | caaspp | ELPAC | nwea map GROWTH

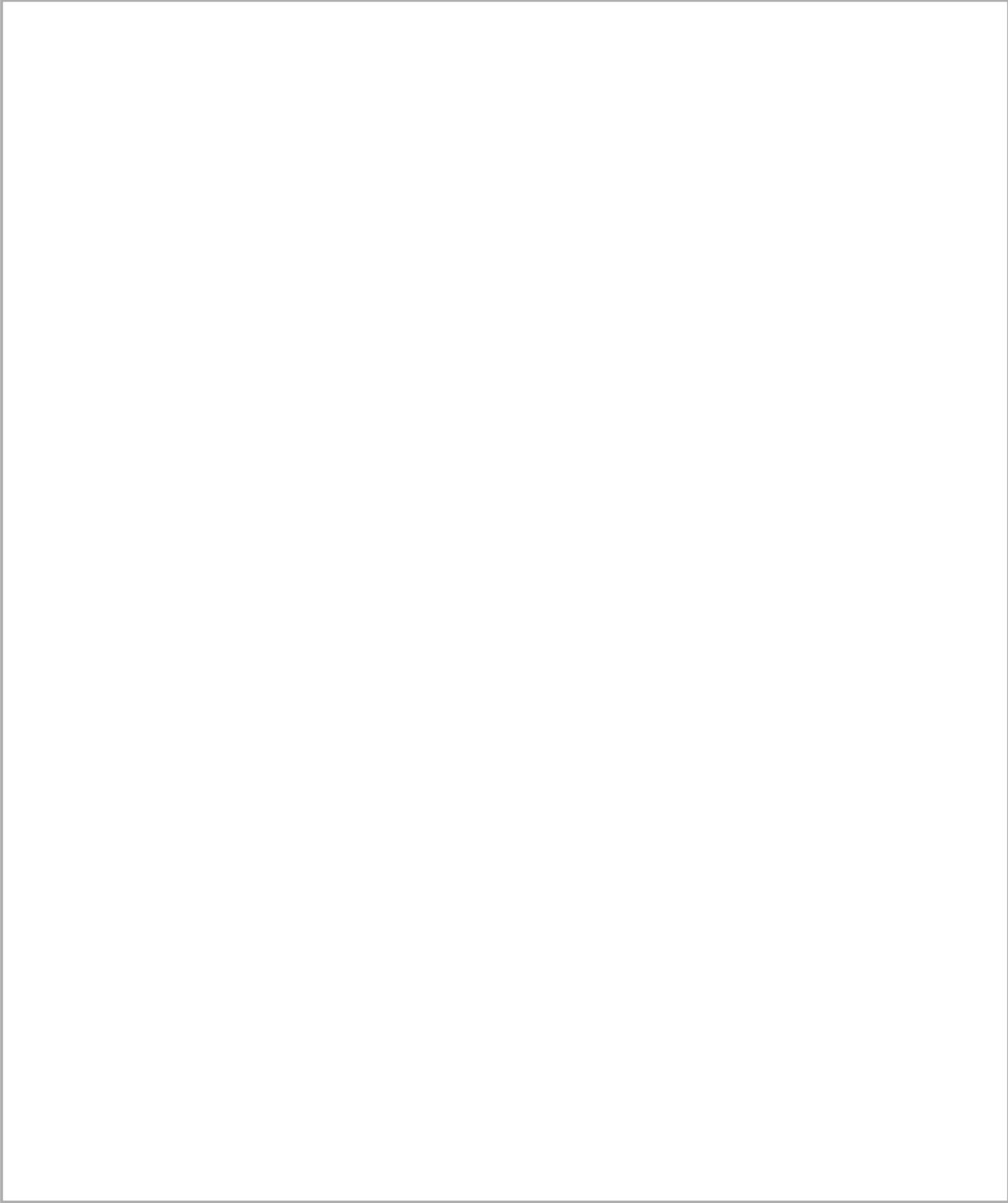
SACS (Standardized Account Code Structure System) | Principal Apportionment Data Collection (PADC) | PowerSchool

PROJECTION Pro | Consolidated Application & Reporting System | Aeries (Student Information System) | CNIPS

kelvin education | ParentSquare | CCGI (CALIFORNIA COLLEGE GUIDANCE INITIATIVE) | SEIS | DATA QUEST (California DEPARTMENT OF EDUCATION)

CALIFORNIA CRADLE TO CAREER DATA SYSTEM | Connecting Data and Insights to Advance Equitable Futures | Education Data Collection System (EDCS)

# Notes



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# Current State of Data Management

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## External Data Systems

**Student & Staff Accountability**  
**State Testing & Reporting**  
**Finance & Apportionment**  
**Compliance & Monitoring**  
**Nutrition & Health**  
**Federal Reporting & Funding**

CALPADS / California School Dashboard  
DataQuest  
CAASPP/ELPAC  
TOMS  
CERS  
SACS Web System  
PADC Web  
ConApp / CARS  
CDE Monitoring Tool (CMT) – (FPM)  
CalSAAS (CTC)  
SARC Web Application (on myCDEconnect)  
CBEDS-ORA  
OPUS-CDS / CDS Administration  
CNIPS  
CAIR Hub / CAIR2 + SCRL tool (CDPH)  
CRDC Submission System  
USAC E-Rate EPC portal  
Cal-PASS Plus / LaunchBoard  
Cradle-to-Career (C2C)

## Internal Data Systems

**Student Information & Enrollment**  
**Assessment & Instruction**  
**Analytics & Data Warehousing**  
**Special Education & Related**  
**HR / Credentialing / Absence**  
**Finance / Procurement**  
**Food Services**  
**Transportation**  
**Facilities / Work Orders / Asset Mgmt.**  
**Security & Operations**  
**Communications & Family Engagement**  
**College & Career / Pathways**  
**Local Surveys & Climate**

SIS/Online enrollment/registration  
Classroom/interim Assessment  
Curriculum/LMS  
Benchmarking  
K-12 analytics/Data Warehouse  
Early warning & MTSS  
SPED/IEP  
Related services & Medicaid claiming  
HR/Payroll/Position control  
Absence/assignment  
ERP/Finance  
Budget modeling  
eProcurement  
POS & nutrition  
Transportation Routing  
Maintenance/Facilities  
Asset Management/1:1  
Visitor/volunteer mgmt.  
Help desk/ITSM  
Identity & SSO  
SIS-integrated messaging/attendance  
Work-based learning & pathways

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# Data Management Challenges

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## In Theory

- **Broken Data Ownership and Accountability**
- Inconsistent **Data Quality** and Definitions
- **Missing Unified Data Governance Framework**
- Disjointed Systems and **Limited Interoperability**
- **Reactive vs. Strategic** Data Culture
- **Insufficient** Data Literacy/**Capacity Building**
- **Disconnected** Data Streams
- Privacy, Security, and **Risk Management Gaps**
- No Centralized **Data Catalog** or Key Metrics
- **Inefficient** and **Manual Business Processes**
- Data **Timeliness** and **Synchronization** Issues
- **Limited Use** of Analytics and Visualization
- Data Architecture and **Integration Strategy**
- **Data ROT** (Redundant, Obsolete, Trivial)

## In Practice

“If you’re not monitoring and not adjusting what you’re doing to get better results, then you can’t be surprised when you don’t get good results,” ... “Program implementation varied across campuses, **with only some schools aligning resources with data-driven practices**”

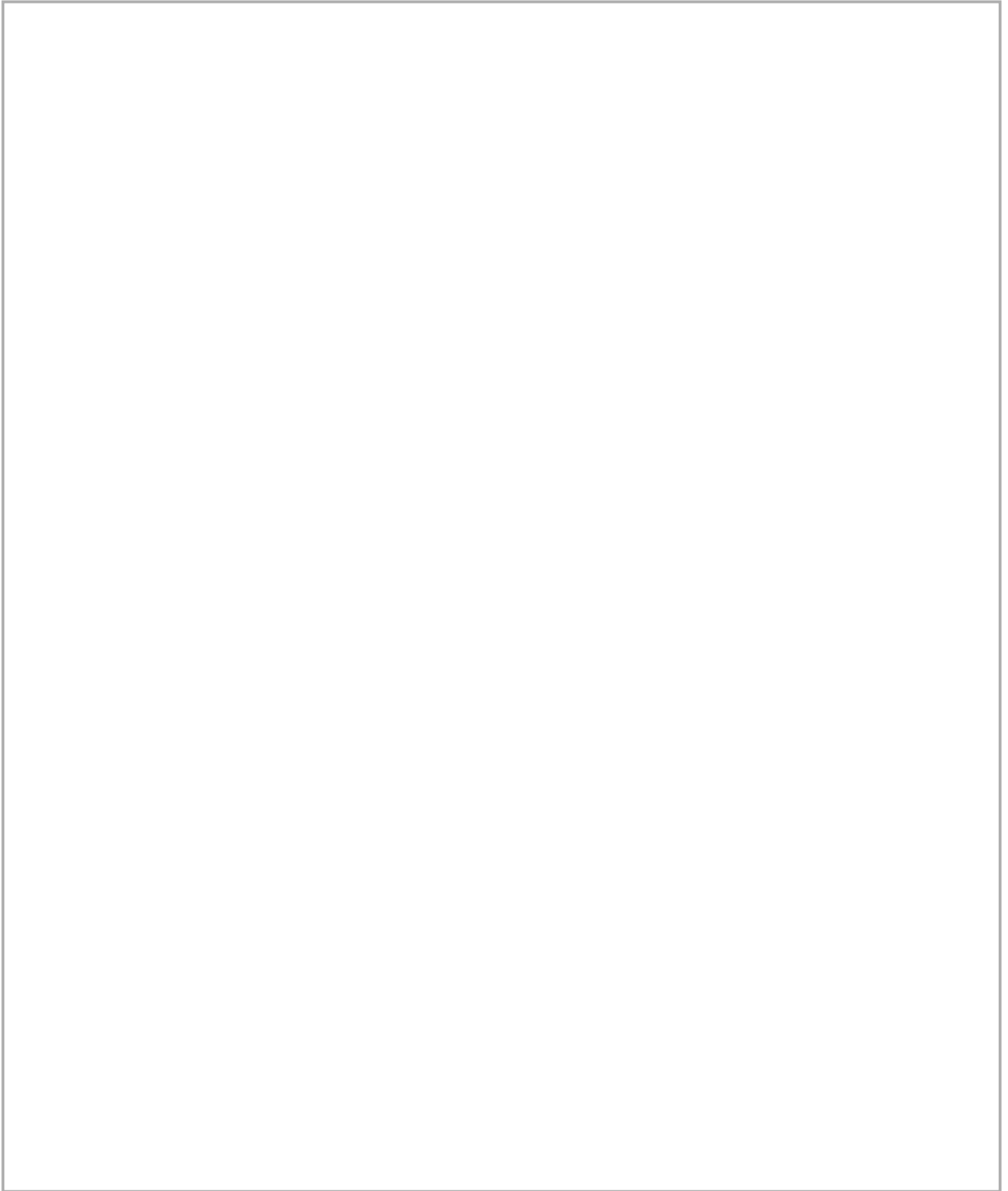
– [EdSource](#) July 11, 2025

“At this point, the state’s enrollment data for ethnic and racial groups is incomplete because Los Angeles Unified failed to record the data for 70,000 students — about 1 in 7 students in the district. That’s **a big enough number to affect statewide percentages.**” – [EdSource](#) April 4, 2023

“California Department of Education sent letters to nearly 250 schools last month — including more than half of the schools in San Francisco Unified — asking them to re-check their attendance records after they submitted data to the state **showing every one of their students had perfect attendance** during the 2016-17 school year”

– [EdSource](#) April 1, 2018

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# Current State of Data Management

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The **CALPADS** Pathway  
To **Differentiated Assistance**

**25-26**

## Final CALPADS Deadlines

“Any district that fails to submit data according to the **processes and timelines** as specified in *EC 60900(f)* and established by the CDE.”

–SB114

**26-27**

## Data Quality Criteria

“This includes submitting and certifying **accurate, correct, and complete data** by each certification deadline.”

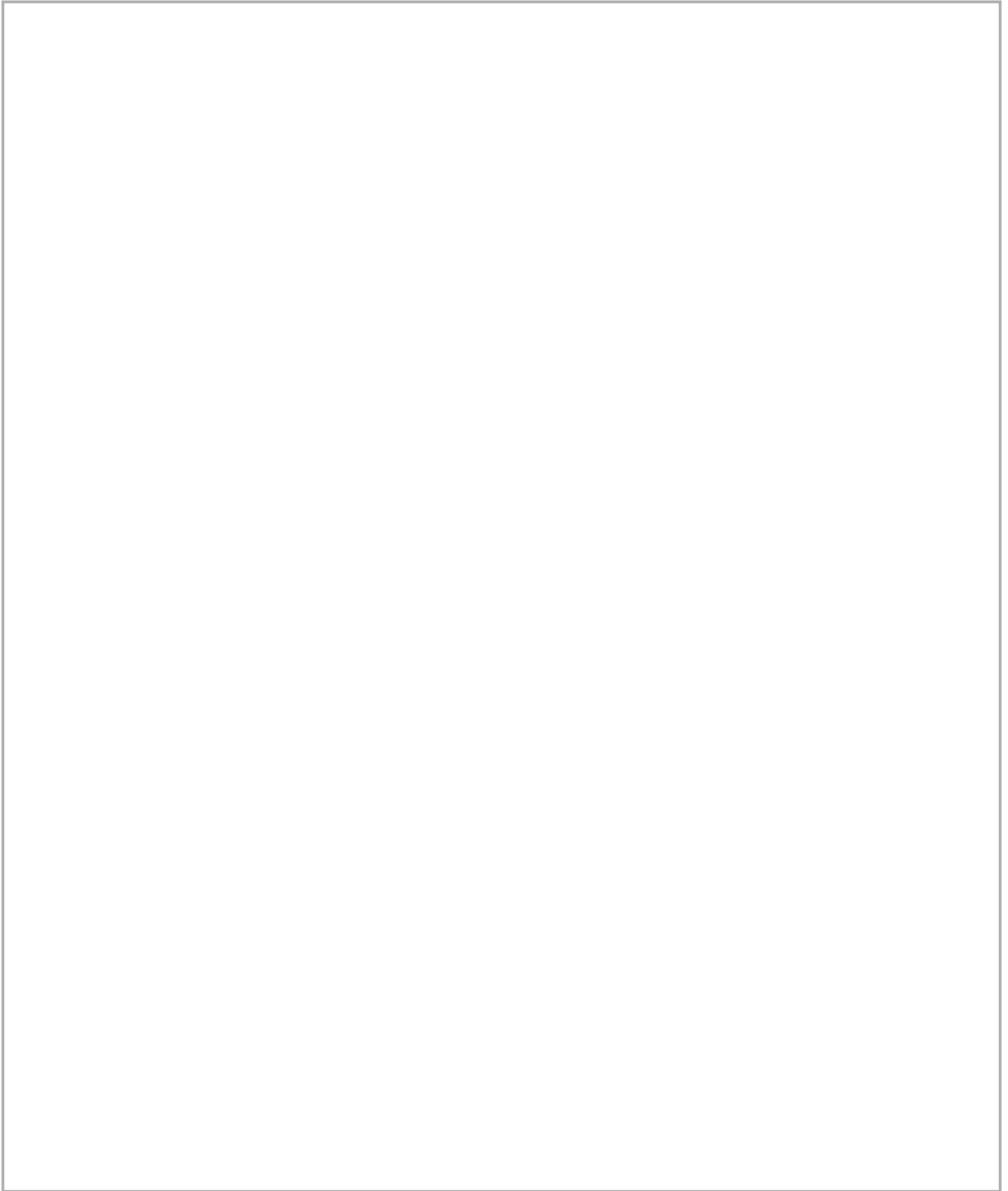
–SB114

### Table Discussion

*7 minutes*

What challenges is your organization facing  
in data management?

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# Formal Data Management

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## Knowledge Areas Of Data Management

**Data Management Body of Knowledge (DMBOK) — *Formal Knowledge Areas***

### Data Governance Program

Data **Architecture**

Data **Integration & Interoperability**

Data **Modeling & Design**

Data **Warehousing & Business Intelligence**

Data **Storage & Operations**

**Reference & Master Data** Management

Data **Security**

**Metadata** Management

Data **Quality** Management

**Document & Content** Management

### Governance Purpose

Enterprise-wide...

- **Authority**
- **Decision Making**
- **Oversight**

***New Local Capabilities!***

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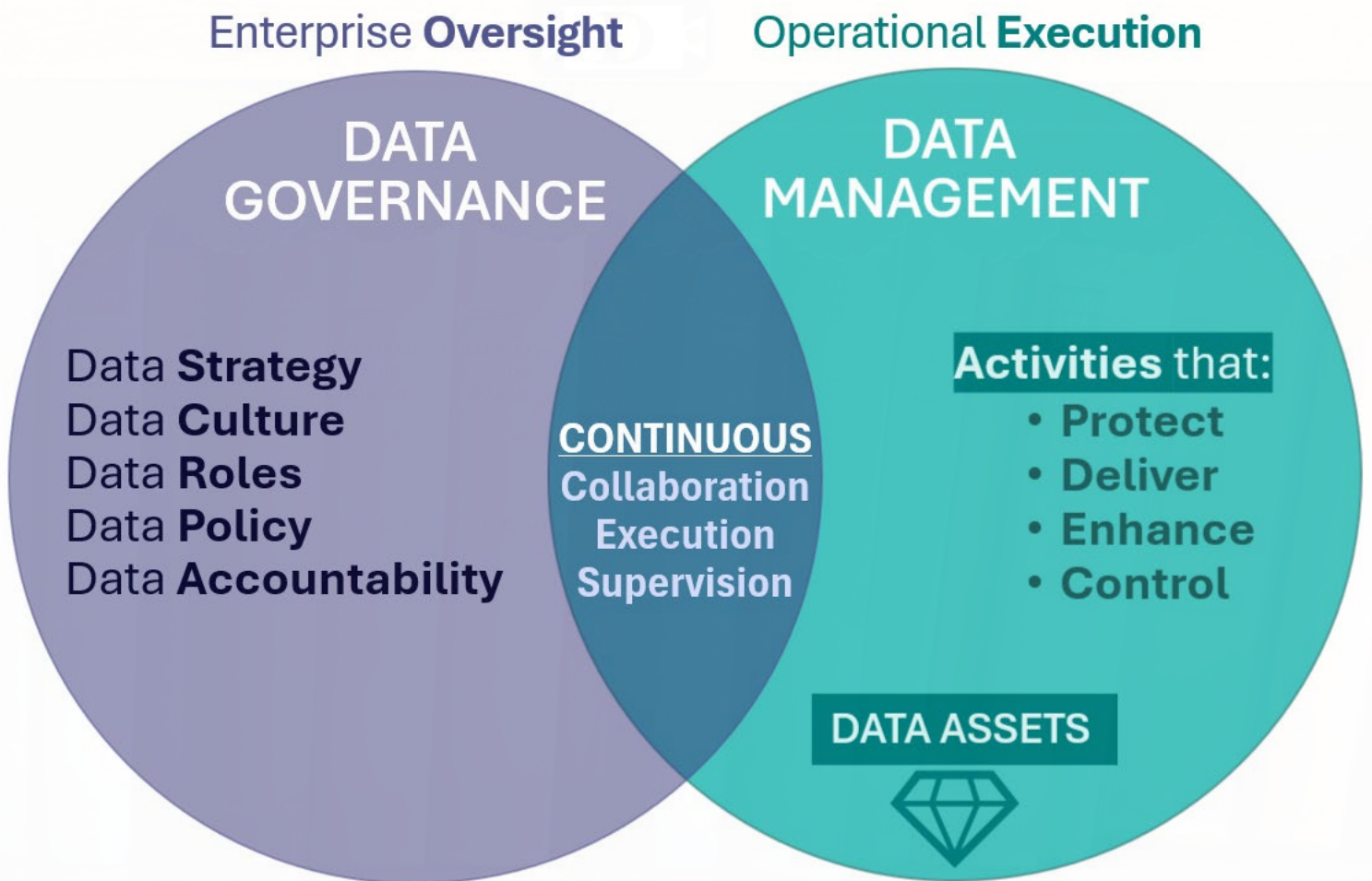
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# Formal Data Management

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## Data Management VS Data Governance



**Data Governance** sets the strategic roles, policies, and metrics (what, why), while **data management** executes those roles and policies through technical processes and tools (how).

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# Data Governance

## CSIS Data Governance Academy

### Session 1

### Data Governance *for* LEA Executives



**Roles  
&  
Responsibilities**



**Policies  
&  
Procedures**



**Audits  
&  
Accountability**

## Organizational Data Governance Roles

Roles	Primary Focus	Responsibilities
Data <b>Owner</b>	<ul style="list-style-type: none"> <li>• <b>Staff accountability</b></li> <li>• <b>Process authority</b></li> <li>• <b>Policy enforcement</b></li> </ul>	<b>Decision-making authority</b> , defining data <b>access rights</b> , ensuring <b>regulatory compliance</b>
Data <b>Steward</b>	<ul style="list-style-type: none"> <li>• <b>Operational data management</b></li> <li>• <b>Data integrity &amp; quality</b></li> </ul>	Ensures <b>data accuracy</b> , <b>consistency</b> , and <b>policy adherence</b>
Data <b>Custodian</b>	<ul style="list-style-type: none"> <li>• <b>Technical systems management</b></li> <li>• <b>Data Privacy &amp; Security</b></li> </ul>	Manages <b>IT infrastructure</b> , ensures <b>secure storage</b> and <b>access controls</b>
Data <b>Consumer</b>	<ul style="list-style-type: none"> <li>• <b>Generalized data use</b></li> <li>• <b>Informed constituents &amp; public</b></li> <li>• <b>Business &amp; operational needs</b></li> </ul>	<b>Uses data</b> according to policies, <b>reports issues</b> , adheres to security guidelines

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# Data Governance

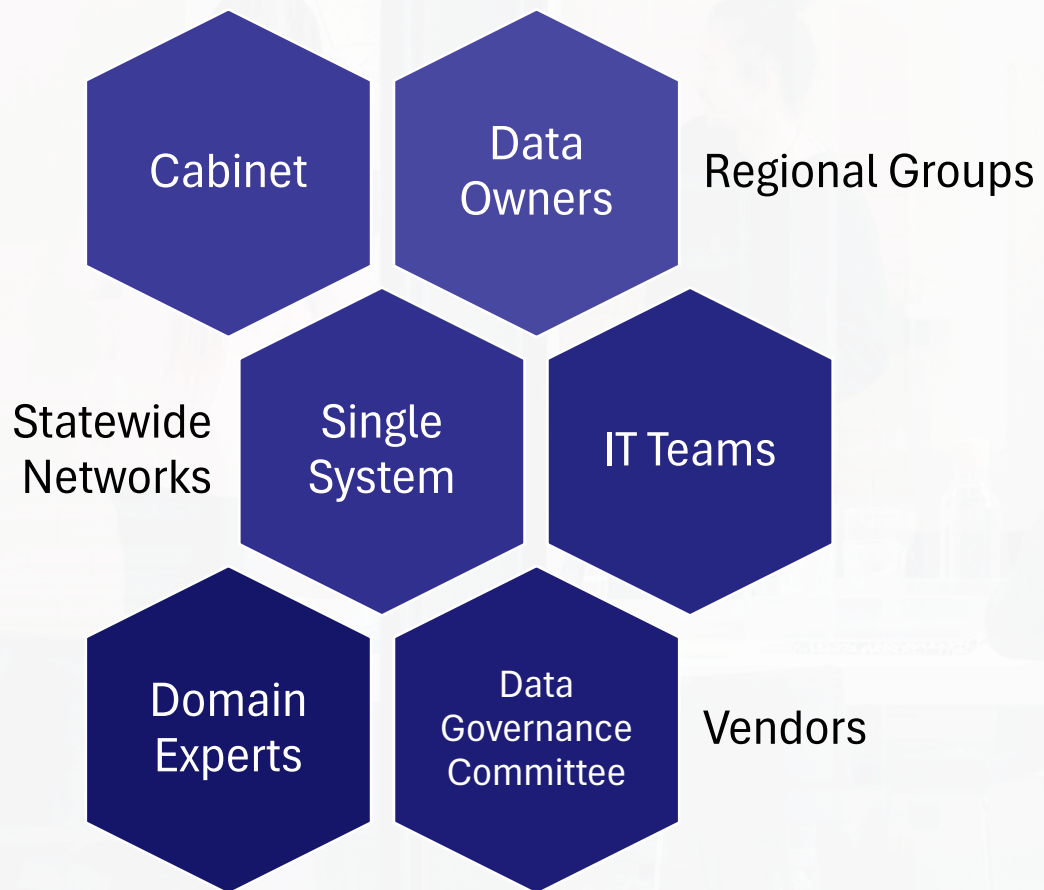
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## CSIS Data Governance Academy

### Session 1

#### Working Groups



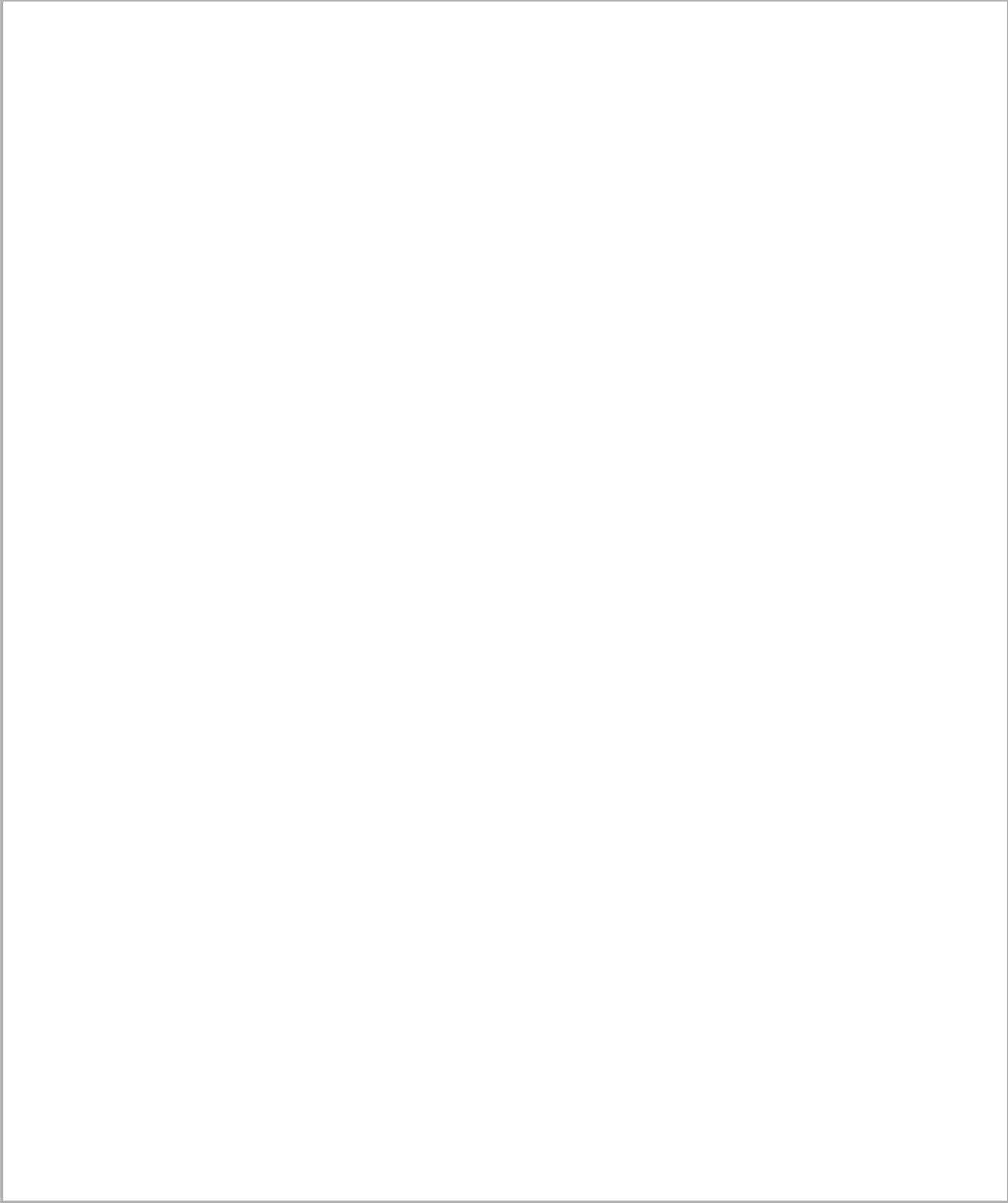
#### Internal

- Cabinet
- Data Owners
- Data Custodians
- Domain Experts + Stewards
- Cross-departmental Groups

#### External

- Regional Groups
- Statewide Networks
- Technology Professionals
- System Vendors

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# Data Governance

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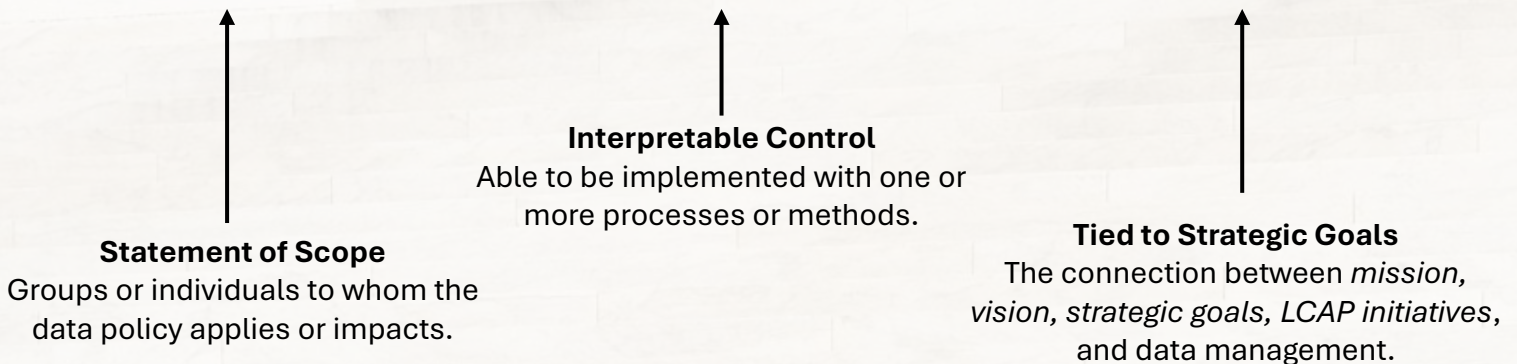
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## CSIS Data Governance Academy

### Session 1

## Data Policy

[Relevant Party] will ensure [New Requirement] in order to [Strategic Justification].



## Local Examples

**Department Directors** will ensure that **data reports in Aeries, SEIS, and CALPADS are audited for quality and accuracy quarterly, including a wet ink or digital signature process from expert staff**, in order to **strengthen reliability, ensure accountability across systems, and support regulatory compliance**.

**Administrators** will ensure that **data is retained only for the duration required by state and federal policy, purged in a time not exceeding seven years**, in order to **protect student privacy, comply with legal agreements, and minimize risk**.

**The Cabinet** will ensure the **executive oversight of a cross-divisional Data Governance Committee, composed of representatives from all business areas**, in order to **facilitate coordinated policy development, ensure shared accountability, and align data practices with our strategic goals**.

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# Data Governance

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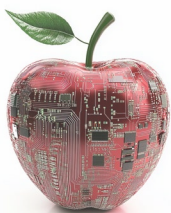
## CSIS Data Governance Academy

### Session 1

### Metrics & KPIs

Category (Examples)	Governance Metric	Management Metric
Data Quality	Percentage of users trained in reports review	Percentage of reports reviewed for accuracy, verified, and signed
Timeliness	Time requested vs. delivered (turnaround time)	Percentage of records entered within a defined acceptable window
Privacy	Number of privacy and security incidents	Number of requests for access modifications
Interoperability	Data elements defined consistently across systems	Percentage of successful data exchanges between systems
Decision-Impact	Number or percentage of decisions made using dashboards and reports	Y/N Percentage: data is available when needed for decision-making

## Data Governance



### As it relates to our internal data initiatives...

- Executive Sponsorship & Supports
- Enterprise-wide Oversight of Data Assets
- Capacity for Data Management Efforts
- **A Vehicle for Change**

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# Data Initiatives as Systems of Change

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## Initiatives: Operationalizing Data Governance

*“An engine is built one gear at a time.”*



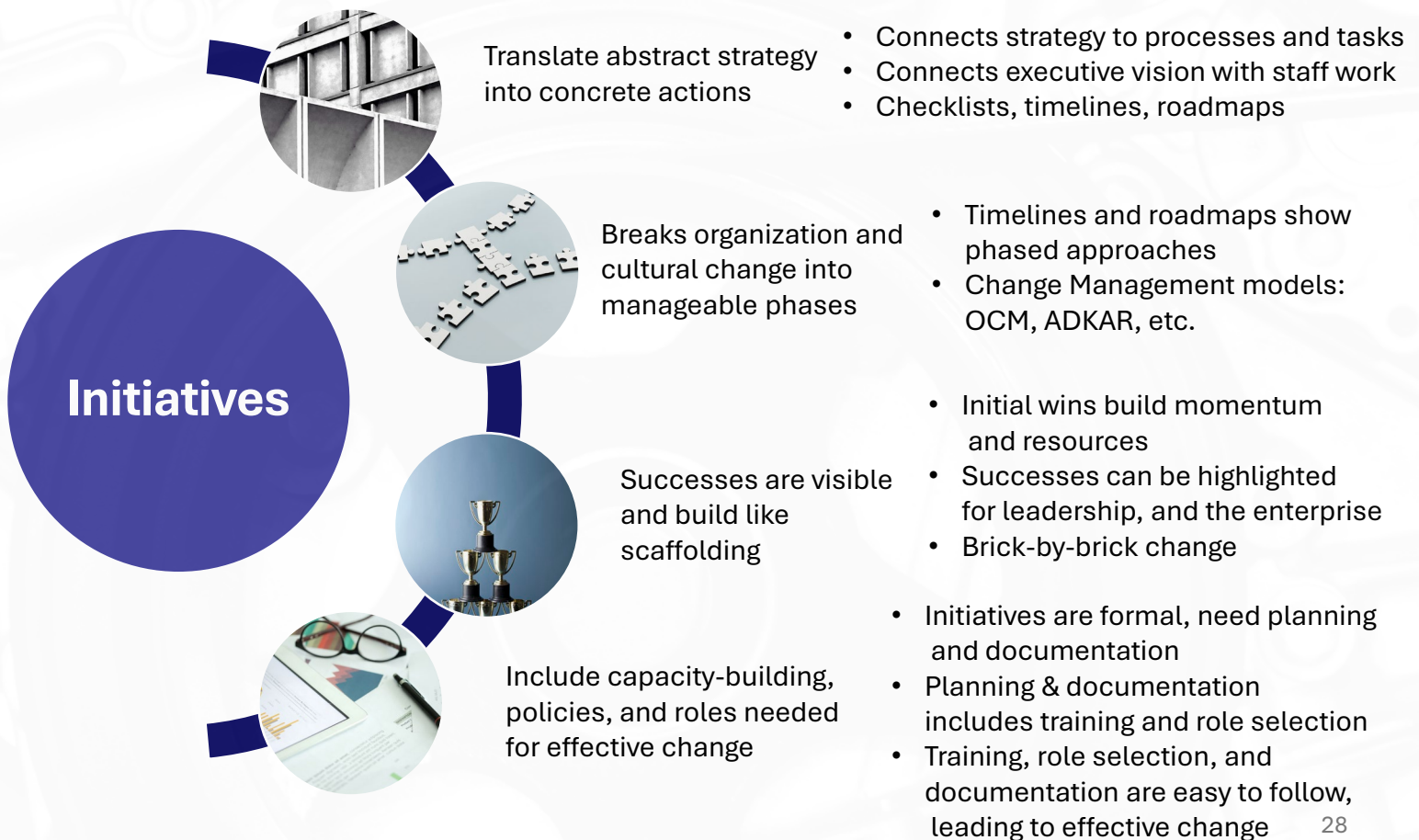
Data Governance Programs

VS



Data Governance Initiatives

## Initiatives: The Gears of Change



# Notes

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# Data Initiatives as Systems of Change

## Data Governance: Initiatives vs Programs

### Initiatives

- **Finite & Time-Bound**  
Defined start and end dates with a specific deliverable or change objective.
- **Outcome/Artifact Focused**  
Success measured by milestones, deliverables, or remediation targets.
- **Project-Based Resourcing**  
Temporary structures, dedicated funding, change management overlays.

### Programs

- **Ongoing & Sustained**  
Continuous operational capability embedded into routine practice.
- **Performance & Maturity Focused**  
Success measured through KPIs, SLAs, compliance, and continuous improvement.
- **Operational Resourcing**  
Durable roles, recurring funding, policy alignment, embedded accountability.

## Change Management

**OCM Strategies for Your Project: Cheat Sheet**

**OCM**  
Organizational Change Management, or OCM for short, is a framework for managing the people side of change; ensure that the impacted employees embrace, adopt, and use the solution.

**Types of Adopters**  
In Everett Rogers' book *Diffusion of Innovations* 5th Edition (Free Press, 2003), Rogers places adopters of innovations into five different categories: **Innovator** (2.5%), **Early Adopter** (13.5%), **Early Majority** (34%), **Late Majority** (34%), and **Laggard** (16%).

**The ADKAR Model**  
ADKAR is an organization that specializes in change. Its *ADKAR Model* outlines what's required to bring individuals along on the change journey.

**The Lippitt-Knoener Model**  
The *Lippitt-Knoener Model for Managing Complex Change* shows what is needed for change to occur successfully.

**Reasons Change Doesn't Happen**  
The obstacles to technology adoption can be many and various, covering a broad spectrum of areas including:

- Poor communication
- Conflicting views of change
- Fear
- Lack of confidence
- Training
- Budgetary constraints
- Lack of executive support

**Adoption Techniques**  
When planning and executing your project, the following techniques can be selected and applied with the intention of being impactful on all the different types of adopters. (Source: [ADKAR](#))

	CATEGORY 1 Innovator	CATEGORY 2 Early Adopter	CATEGORY 3 Early Majority	CATEGORY 4 Late Majority	CATEGORY 5 Laggard
Proof of Concepts	+	+	+	+	+
Train the Trainer	+	+	+	+	+
Context	+	+	+	+	+
Marketing	+	+	+	+	+
Incentives	+	+	+	+	+
Herd Mentality	+	+	+	+	+
Group Training	+	+	+	+	+
Champions	+	+	+	+	+
One-on-One	+	+	+	+	+
Force	+	+	+	+	+



- **Project Management - San Diego COE**
- **SDCOE Project Management Toolkit**

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# Example Initiatives

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## Data Quality Improvement & Assurance Initiative

**Purpose:** Improve the accuracy, completeness, and consistency of high-value data (e.g., in CALPADS and SIS).

**Typical Focus Areas:**

- Define data quality review processes, recruit expert staff for data quality review
- Assign data owners and data stewards
- Establish data review and correction cycles
- Define validation rules

**Outcome:** Fewer reporting errors, higher trust in data, smoother state and federal reporting.

## Enterprise Data Catalogue & Documentation Initiative

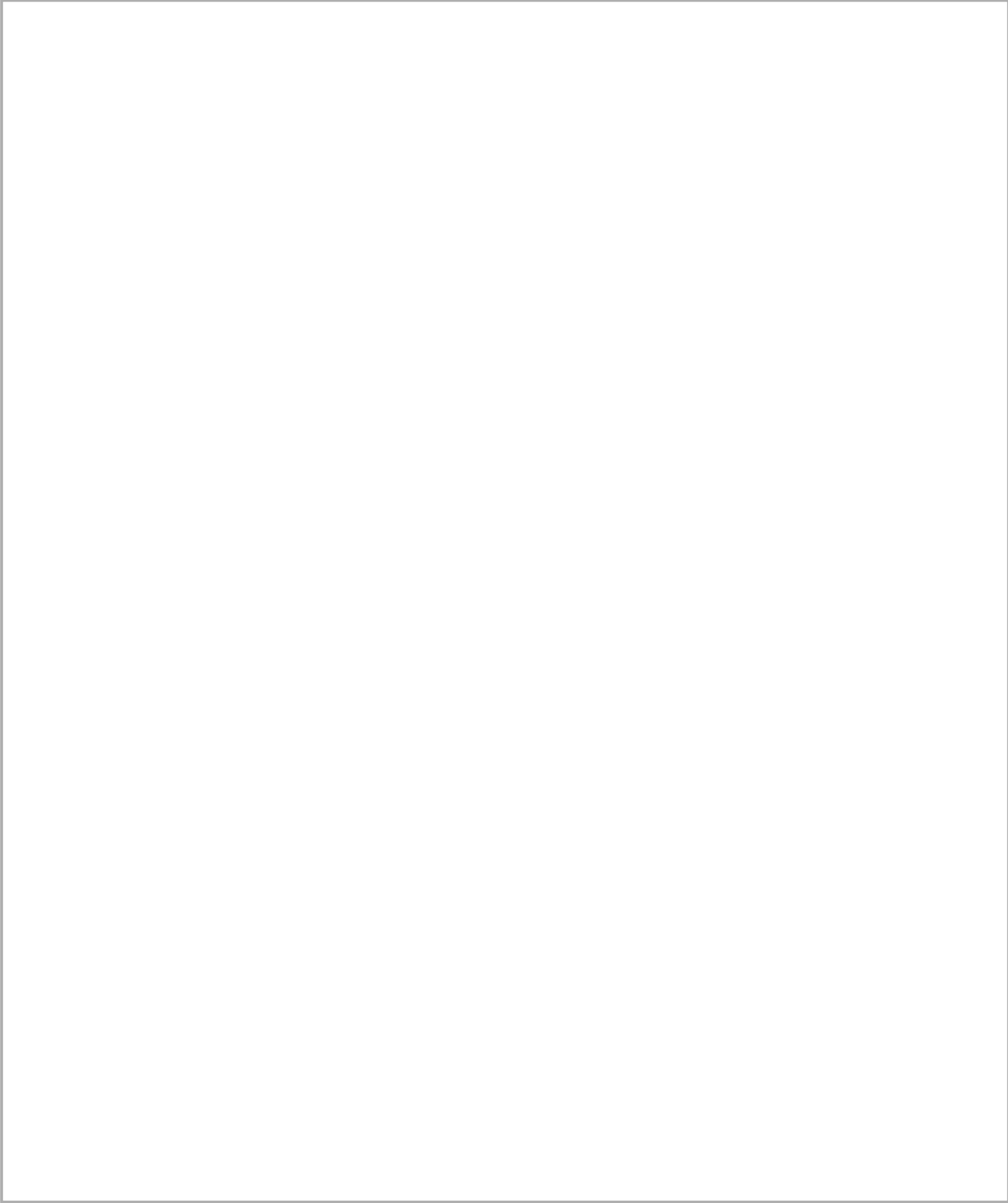
**Purpose:** Create a shared understanding of existing organization data, the systems in which it resides, and how should be maintained and used.

**Typical Focus Areas:**

- Inventory critical data sets and data systems
- Document data definitions, business rules, and data owners
- Codify standards for naming, access, and usage

**Outcome:** Consistent reporting across departments, faster onboarding, reduced confusion.

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# Example Initiatives

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## Privacy, Security, and Data Sharing Compliance Initiative

**Purpose:** Strengthen compliance with privacy laws and responsible data use practices.

**Typical Focus Areas:**

- Perform risk assessments and determine areas of risk
- Standardize data sharing agreements and approval processes
- Clarify roles for data access, FERPA reviews, and incident responses
- Monitor ongoing compliance rather than one-time reviews

**Outcome:** Lower risk, clearer accountability, safer data sharing with partners (e.g., LEAs, COEs, vendors).

## Early Warning/Student Support Analytics Initiative

**Purpose:** Use integrated data to proactively identify and support at-risk students.

**Typical Focus Areas:**

- Combine attendance, behavior, and academic indicators
- Define intervention thresholds and escalation processes
- Clarify how data informs action for cultural shift towards data

**Outcome:** Timelier interventions and stronger student outcomes.

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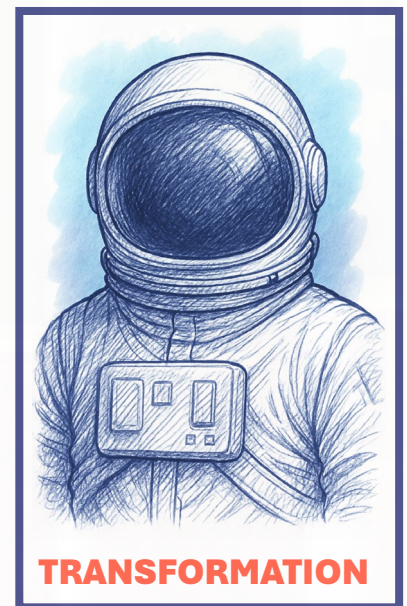
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# Choose Your Data Initiative

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## 3 Types of Education Data Initiatives



### Compliance Initiatives

**Purpose:** To meet mandated requirements or external standards (e.g., state, federal, or funding compliance).

**Drivers:**

*External* – Regulations, audits, timelines, and mandates.

**Outcomes:**

- Form a baseline of trust and ensure compliance that allows your agency to operate legally and ethically – *not necessarily intended to improve efficiency or insight.*

# Notes

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# Choose Your Data Initiative

## Compliance Initiatives



### Pros:

- Establish a baseline of trust
- Enable lawful and regulated operations
- Creates a foundation for future work



### Cons:

- Primarily reactions – triggered by laws, regulations
- Narrow in scope
- Risk of “check the box” behaviors



### Paradigms:

- Privacy and Security Initiatives
- Data Retention and Records Management Initiatives
- State and Federal Reporting Adherence Initiatives

## Example Compliance Initiatives

	Focus	Typical Activities	Tools/Systems
<b>CALPADS Data Quality &amp; Governance</b>	Student information accuracy for state reporting	Data validation routines, certification cycles, training site staff, local data governance committees	CALPADS, SIS integrations
<b>Mandated State &amp; Federal Reporting Automation</b>	Streamline submissions (e.g., CARS, Civil Rights Data Collection, SARC)	Automate data pulls, implement validation dashboards	Ed-Fi, Power BI, DataHub
<b>Student Privacy &amp; Security Compliance</b>	Compliance with CCPA, FERPA, and SOPIPA	Data sharing agreements, access audits, privacy impact assessments	OneTrust, Secure FTPs, Data Access logs
<b>Special Education Data Integrity Initiative</b>	Alignment between SIS and SEIS data	Automated sync checks, exception reports	SEIS, CALPADS, local data warehouse
<b>Attendance &amp; Enrollment Audit Readiness</b>	Accurate ADA reporting for LCFF funding	Automated attendance reconciliation, audit logs	SIS (Aeries, Infinite Campus, etc.)

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# Choose Your Data Initiative

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## Key Compliance Documentation

Key Compliance Documents by LEA Size	
<b>Small LEAs</b>	<b>Annual Reporting Calendar</b> A single-page visual calendar showing all state reporting deadlines (CALPADS, LCAP, Title programs) with 30/60/90-day preparation milestones. This prevents surprises and helps small teams with limited capacity plan their year.
<b>Medium LEAs</b>	<b>Data Responsibility Matrix</b> A simple one-page table showing what needs to get done, who does it, and by when. Rows are key compliance tasks (enrollment census, attendance reporting, discipline submissions, etc.), columns are roles (site secretaries, registrar, special ed coordinator, etc.), and cells show who's responsible vs. who supports.
<b>Large LEAs</b>	<b>Data Quality Scorecard</b> A dashboard showing error rates, submission timeliness, and audit findings by department/site. Creates accountability through transparency and allows leadership to identify which parts of the organization need support.

### Table Discussion

*7 minutes*

Where do we most often struggle to meet compliance requirements (timelines, accuracy, completeness, documentation)?

# Notes

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# Choose Your Data Initiative

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## Improvement Initiatives



**Purpose:** To make existing processes more efficient, reliable, and ensure consistency – often by leveraging lessons learned from compliance work.

**Drivers:**

*Internal* – Increased quality, efficiency, or usability of Data.

**Outcomes:** Improved data quality and operational efficiency, freeing up time and resources. Developing a data-informed culture.

### + Pros

- Tangible gains in services and efficiencies
- Stronger cross-functional collaboration
- Better data quality in source systems and throughout organization

### — Cons

- Requires sustained commitment
- Benefits may be incremental, harder to measure for “quick wins” up front
- Benefits may become incremental rather than dramatic

### Paradigms:

- Data Quality Process Improvement Initiatives
- Documentation and Workflow Standardization Initiatives
- Systems Integration and Process Alignment Initiatives

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# Choose Your Data Initiative

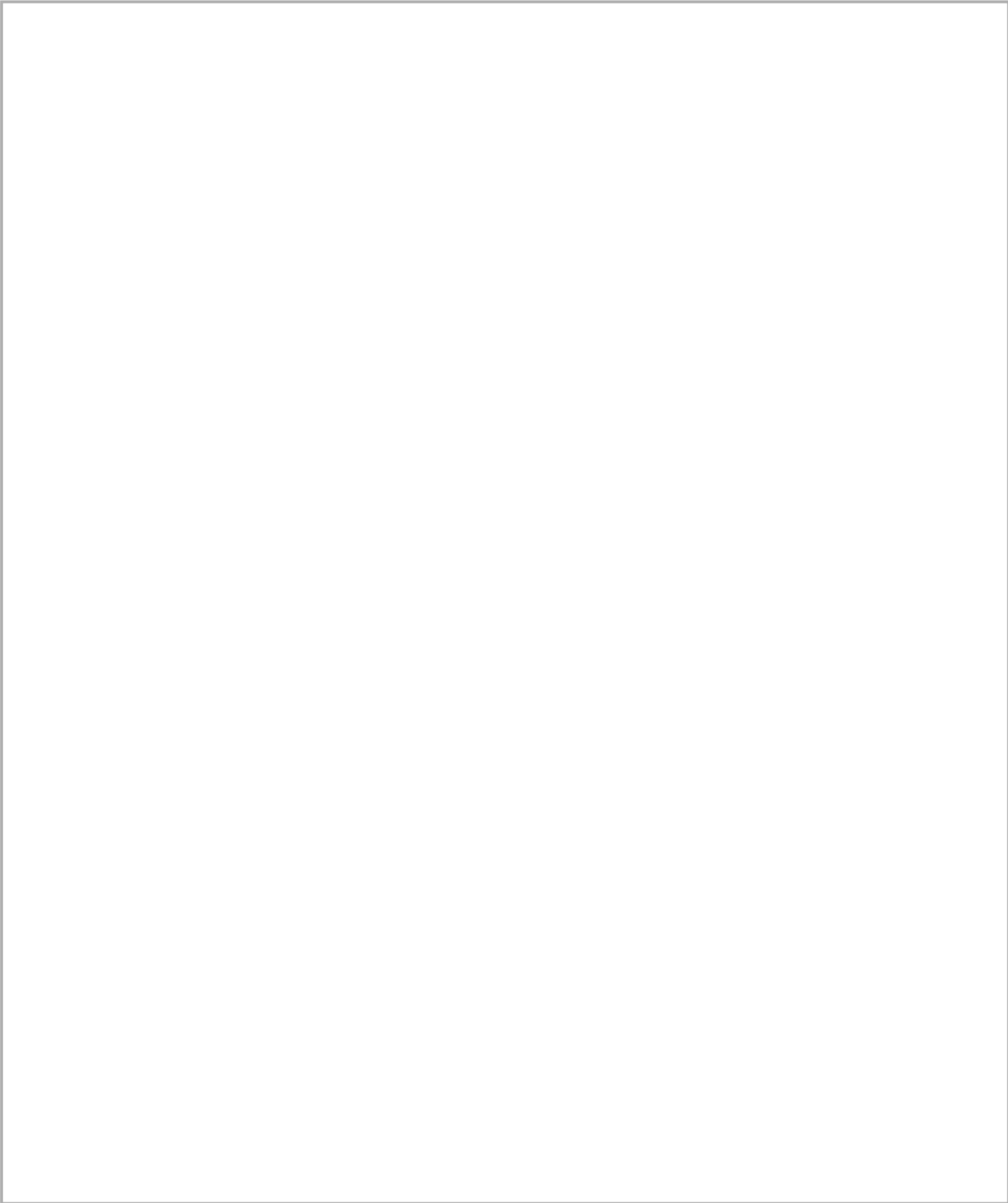
## Example Improvement Initiatives

	Focus	Typical Activities	Tools/Systems
<b>Local Data Warehouse/ Analytics Platform</b>	Integrated data views across systems	Build dashboards for LCAP metrics, early warning indicators, and intervention tracking	Power BI, Tableau, Google Looker, Snowflake
<b>Data Literacy &amp; Culture Building</b>	Improve staff capacity to use data for decision-making	Train principals and PLCs on inquiry cycles, equity gap analysis	Data teams, PD sessions
<b>Formative Assessment &amp; Early Warning Analytics</b>	Identify learning gaps and student risks early	Integrate academic, attendance, and SEL data into unified dashboards	Panorama, i-Ready, Renaissance, Illuminate
<b>Equity Data Review Cycles</b>	Analyze disaggregated data by student group	Build regular review protocols, equity scorecards	Custom dashboards, Google Data Studio
<b>Continuous Improvement Data System Alignment</b>	Connect LCAP, MTSS, and community school data	Create cross-department data sharing contracts and logic models	Smartsheets, Airtable, data hubs

## Key Improvement Documentation

Key Improvement Documents by LEA Size	
<b>Small LEAs</b>	<p><b>Early Warning Indicator Definitions &amp; Thresholds</b></p> <p>A simple document defining exactly what triggers concern (e.g., "3+ absences in 2 weeks" or "D/F in core class") and what action follows. Turns good intentions into systematic practice.</p>
<b>Medium LEAs</b>	<p><b>Data Analysis Playbook</b></p> <p>Step-by-step guides for the 5-7 most common analyses the district needs (e.g., "How to identify students not on track to graduate" or "How to evaluate intervention effectiveness"). Democratizes analytical capability beyond individual data persons.</p>
<b>Large LEAs</b>	<p><b>Program Evaluation Template</b></p> <p>A standardized template for evaluating any initiative that includes baseline data, target outcomes, cost-per-student, and equity analysis. Ensures all improvement efforts are evidence-based and comparable.</p>

# Notes

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# Activity: Early Warning Indicators

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**Instructions:** *Using the prompts below, build a minimum viable early warning data management indicator that is consistent, actionable, and measurable.*

## Targeted Data Outcomes:

*Select one area of data management that you would like to improve at your LEA.*

- Data Timeliness
- Data Privacy & Security
- Data Quality
- Data Integrations
- Data-Informed Decisions
- Improved Documentation

## Measurable Indicators

List one to three metrics that can provide an early warning of whether your LEA is on track to meet the targeted outcome (e.g., *number of validations, error-free milestones, API success/fail rate*). We aren't inventing data; we're organizing what is already available into a consistent routine that triggers action.

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

## Thresholds (The “If” of our if/then triggers)

*If [indicator] surpasses [threshold]...*

(a) If \_\_\_\_\_ surpasses \_\_\_\_\_ ...

(b) If \_\_\_\_\_ surpasses \_\_\_\_\_ ...

(c) If \_\_\_\_\_ surpasses \_\_\_\_\_ ...

# Activity: Early Warning Indicators, Cont.

## Escalation Path

*When a threshold is triggered, what action follows, by whom, and when?*

### Early Warning Indicators Table

*Who owns the response? What actions must occur?*

*When must the actions take place? Where is evidence of action recorded?*

Outcome	Metric	Threshold (trigger)	Owner	Action	Timeline	Docs.
E.g., Chronic Absenteeism	Absence & Attendance (CALPADS)	≥1 student missing 5 days of school in a 30-day period.	Counselor, Attendance Clerk	Family contact	Within 5 school days	Student Support Log
E.g., Behavioral Incidents	Student Incident Data	≥2 behavioral incidents in a 30-day period.	Assistant Principal	Behavioral review & support plan	Within 3 school days	MTSS Tracker

### The Formula

If **[metric/indicator]** is at or above **[threshold]** then **[owner]** must **[action]** within **[timeframe]** and update/log in **[documentation]**.

- (1) If \_\_\_\_\_ is at or above \_\_\_\_\_ then \_\_\_\_\_ must \_\_\_\_\_ within \_\_\_\_\_ and update/log in \_\_\_\_\_.
- (2) If \_\_\_\_\_ is at or above \_\_\_\_\_ then \_\_\_\_\_ must \_\_\_\_\_ within \_\_\_\_\_ and update/log in \_\_\_\_\_.
- (3) If \_\_\_\_\_ is at or above \_\_\_\_\_ then \_\_\_\_\_ must \_\_\_\_\_ within \_\_\_\_\_ and update/log in \_\_\_\_\_.

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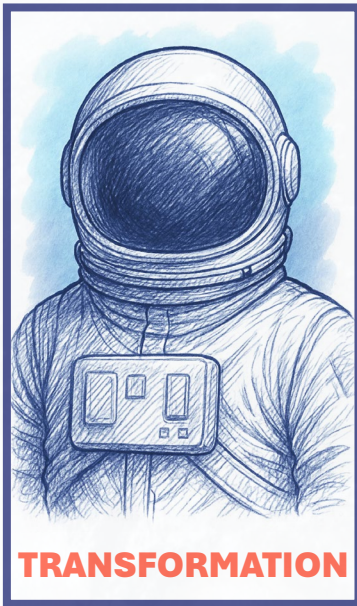
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# Choose Your Data Initiative

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## Transformation Initiatives



**Purpose:** To fundamentally change how data is governed, accessed, and used across the organization – aligning data strategy with mission and vision.

**Motivation:**

**Strategic** – Leadership commitment to data-driven decision-making and organizational innovation.

**Outcomes:** Data becomes a strategic asset, with efforts guided by a shared vision and ingrained data-driven culture.

### + Pros:

- Data becomes a strategic asset
- Enterprise-wide alignment
- Advanced decision-making
- Long term ROI
- Durable culture change

### — Cons:

- High complexity and risk
- Requires sustained executive sponsorship
- Significant time and resource investment
- Cultural resistance present

### Paradigms:

- Data Governance Program Implementation Initiatives
- Data Standards and Warehousing, Predictive Analytics Initiatives
- Process Modernization Initiatives

# Notes

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# Choose Your Data Initiative

## Example Transformation Initiatives

	Focus	Typical Activities	Tools/Systems
<b>Interoperability &amp; Data Architecture Modernization</b>	Streamlined data flow between systems	Adopt Ed-Fi or CEDS standards, build APIs for SIS > LMS > Assessment > ERP integration	Ed-Fi, Azure Data Factory, AWS Glue
<b>Predictive Analytics for Student Success</b>	Move from descriptive to predictive insights	Use ML models for attendance, course performance, or graduation likelihood	Power BI Premium, Python models, Azure ML
<b>Longitudinal Data System Development</b>	Track student outcomes PK–12–college–career	Partner with county offices and/or state agencies for data pipelines	Data Sharing and custom API integrations
<b>AI-Augmented Decision Support Tools</b>	Use AI for personalized interventions and resource allocation	Develop recommendation engines for intervention matching	Custom AI copilots, LLM integrations
<b>Data-Driven Strategic Planning &amp; Scenario Modeling</b>	Use simulations to inform resource and staffing decisions	Integrate enrollment projections, fiscal modeling, and outcome data	Frontline (Forecast5), Tableau Scenario Analytics

## Key Transformation Documentation

Key Transformation Documents by LEA Size		
<b>Small LEAs</b>	Pilot Program Design Document	A template for testing transformational ideas on a small scale (one grade, one school) including success metrics, resource requirements, and go/no-go decision criteria. Allows small districts to innovate without betting the farm.
<b>Medium LEAs</b>	Change Management Strategy	A stakeholder map identifying personnel types: Champions, resisters, and fence-sitters with specific tactics for building buy-in at each level. Transformation fails not from bad ideas but from poor change management.
<b>Large LEAs</b>	Data Platform Architecture Diagram	A visual map showing how all critical systems connect (SIS to assessment platform to EWS to case management) with data flow directions and integration points. Essential for ensuring the technical infrastructure can support the transformation vision.

# Notes

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# Choose Your Data Initiative

## Data Initiatives Compared

	<b>Compliance</b>	<b>Improvement</b>	<b>Transformation</b>
<b>Primary Driver</b>	<i>External</i> Laws – Policies	<i>Internal</i> Efficiency – Accuracy	<i>Strategic</i> Vision – Innovation
<b>Focus</b>	Meeting <b>Standards</b>	Process <b>Enhancements</b>	<b>Culture and Capabilities</b>
<b>Scope</b>	Narrow, Tactical	Moderate, Cross-functional	Broad, Enterprise-wide
<b>Change Type</b>	Reactive	Incremental	Strategic and Structural
<b>Outcome</b>	Regulatory Compliance	Reliable, High-quality Data	Data-driven Organization
<b>Leadership Role</b>	<b>Oversight and Accountability</b>	<b>Sponsorship and Resource Support</b>	<b>Vision and Cultural Leadership</b>

# Notes

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# Scenario-Based Activity

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*For each scenario below, indicate whether it requires or represents a compliance initiative, an improvement initiative, or a transformation initiative.*

## Scenario 1

The district received notice of an upcoming external review tied to funding, and leadership is concerned that attendance and enrollment records won't withstand scrutiny. Multiple schools are using inconsistent procedures for documenting excused absences and correcting attendance, and prior year records show gaps in audit trails. The immediate priority is to meet required standards, document controls, and ensure the agency can demonstrate lawful and accurate reporting on a fixed timeline.

Compliance     Improvement     Transformation

## Scenario 2

A parent advocacy group raises concerns about student data being shared with a third-party service provider without clear documentation of purpose, access controls, or retention practices. Staff discover that contracts and data sharing agreements vary by department, and no one can quickly confirm who has access to what data or whether disclosures align with policy. The agency needs a rapid, standard response that closes risk, clarifies approval steps, and proves adherence to privacy requirements.

Compliance     Improvement     Transformation

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# Scenario-Based Activity, Cont.

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*For each scenario below, indicate whether it requires or represents a compliance initiative, an improvement initiative, or a transformation initiative.*

## Scenario 3

Special education teams report that service minutes and program details differ between the special education data system and the student information system, causing downstream errors in state submissions. The discrepancy is not isolated – every reporting cycle requires manual cross-checks, and fixes are applied inconsistently across schools. The agency wants a repeatable, cross-functional process that reduces rework, improves accuracy at the source, and makes the “right way” the easy way.

Compliance     Improvement     Transformation

## Scenario 4

Each year, the district scrambles to assemble required state/federal reports from spreadsheets owned by different departments, with last minute data cleaning and unclear ownership for corrections. The same issues persist annually: missing fields, mismatched counts, and staff burnout close to deadlines. Leaders want to streamline existing workflows, defined who owns each data element, and implement lightweight checks so the cycle becomes predictable and less stressful.

Compliance     Improvement     Transformation

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# Scenario-Based Activity, Cont.

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*For each scenario below, indicate whether it requires or represents a compliance initiative, an improvement initiative, or a transformation initiative.*

## Scenario 5

A school board sets a new strategic goal: move from “reporting after the fact” to using data proactively to share instruction, resource allocation, and student supports throughout the year. Right now, data is trapped in silos, and most decisions rely on lagging indicators and anecdotal updates. The vision requires enterprise-wide alignment, new capabilities for analytics, and a sustained culture shift so that data becomes a routine part of how the organization operates.

Compliance     Improvement     Transformation

## Scenario 6

An updated guidance memo changes what must be collected and retained for a specific program, and the district has only a short window to comply. Several departments currently store records in shared drives with inconsistent naming and no standardized retention schedule, making it hard to prove compliance or respond to records requests. The agency needs formalized retention rules, standardized access and storage practices, and to ensure that all staff are following the same required procedures.

Compliance     Improvement     Transformation

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# Scenario-Based Activity, Cont.

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*For each scenario below, indicate whether it requires or represents a compliance initiative, an improvement initiative, or a transformation initiative.*

## Scenario 7

Principals want an early-warning dashboard, but teams can't agree on what "at-risk" means, which indicators count, or what actions should follow a flag. Some schools trigger interventions after a few absences; others wait until grading periods end, and documentation of follow-up varies widely. The district decides to create clear definitions and thresholds, assigning roles for responses, and establishing a consistent escalation path so the practice is reliable across all school sites.

Compliance     Improvement     Transformation

## Scenario 8

The Superintendent launches an initiative to modernize how the district uses data by creating a single, integrated view across academics, attendance, behavior, and program participation. Today, each department runs its own reports with different definitions, and there is no shared language or enterprise-wide "source of truth". The change will require structural decisions about governance, investment in shared tools and training, and leadership-driven adoption so the organization can operate as a data-driven agency rather than as disconnected teams.

Compliance     Improvement     Transformation

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# Scenario-Based Activity, Cont.

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*For each scenario below, indicate whether it requires or represents a compliance initiative, an improvement initiative, or a transformation initiative.*

## Scenario 9

Staff discover that a commonly used set of demographic fields (e.g., home address) is entered differently across school sites because training materials are outdated and business rules are undocumented. This leads to inconsistent reporting, confusion during family support conversations, and frequent corrections after data has already been used for decision making. The goal is now to improve the reliability of key data sets by updating procedures and standardizing trainings.

Compliance     Improvement     Transformation

## Scenario 10

A new initiative from leadership aims to use advanced analytics to identify patterns in course-taking, attendance, and school-wide supports to redesign intervention services and staffing models. The district wants to test new approaches, measure results, and scale what works – but it lacks consistent evaluation methods, baseline measures, and a shared approach to data analysis across departments. Success will require not only tools, but enterprise-wide capabilities for measurement, learning cycles, and sustained cross-functional ownership.

Compliance     Improvement     Transformation

# Notes

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# A Framework for Data Initiatives

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## The All-Initiatives Checklist

- Executive Sponsorship
- Iterative Delivery Process
- Clear Business Objectives
- Cross-Functional Project Team
- Technical Infrastructure & Tools
- High-Quality, Easily Accessible Data
- Change Management Focus on User Adoption
- Data Governance Framework Established or In-progress

## Data Initiatives - Roadmap

### *Why you're doing it*

#### **Problem/Opportunity**

- Reasons
- Motivations
- Risks of Inaction

### *What gets you there*

#### **People**

- Needs
- Behaviors
- Experiences
- Expertise

#### **Resources**

- Time
- Money
- Space

#### **Data Management Activities**

### *What you'll need to figure out*

#### **Constraints**

- Costs
- Capabilities
- Timelines
- Reality

#### **Solutions**

- People
- Impact
- Purpose Fit
- Maintenance

# Notes

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# A Framework for Data Initiatives

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## Frame the Problem

### *Why you're doing it*

#### **Problem / Opportunity**

- Reasons
- Motivations
- Risks of Inaction

### **Data Challenge / Improvement Opportunity**

- Compliance drivers (LCAP, LCFF, CALPADS)
- Student equity and achievement gaps
- Operational inefficiencies and data silos
- Risks of inaccurate or untimely data
- CALPADS Differentiated Assistance
- Data-informed decision-making
- Improved data practices
- Data governance roles

## Sample Problem Statements

### **Data Challenge / Improvement Opportunity**

#### *Compliance drivers (LCAP, LCFF, CALPADS)*

Fictitious LEA is experiencing recurring challenges meeting LCAP, LCFF, and CALPADS compliance requirements as evidenced by late submissions, data certification corrections, audit findings, and rework across reporting cycles. These issues increase staff workload, elevate compliance risk, and reduce confidence in the accuracy and alignment of data being used for funding, accountability, and planning. Despite multiple reporting cycles and corrective efforts, similar compliance issues continue to occur, indicating the underlying root causes have not been fully identified or addressed.

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# A Framework for Data Initiatives

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## Sample Problem Statements

### **Data Challenge / Improvement Opportunity**

#### *CALPADS Differentiated Assistance*

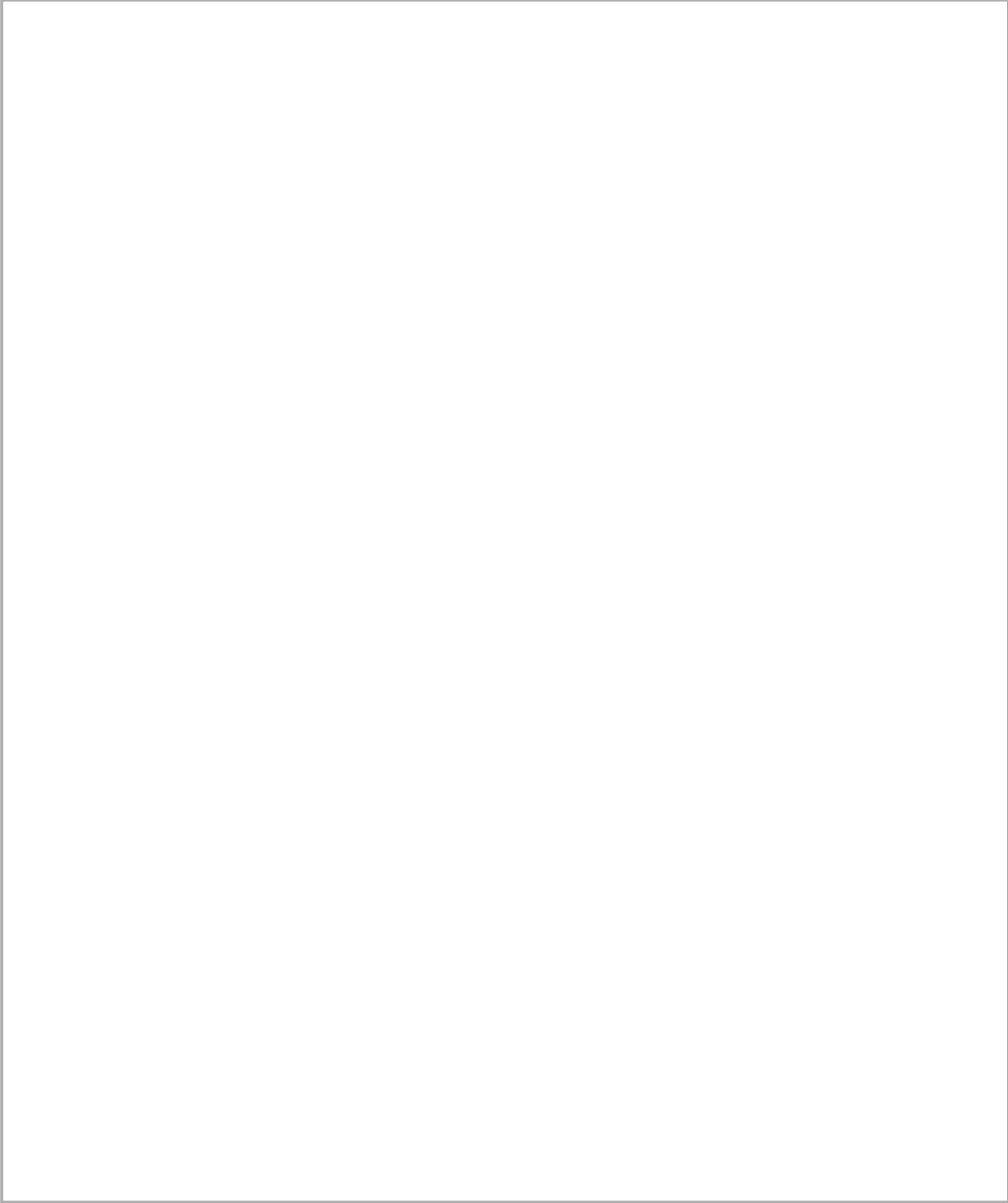
Sacramento Kings Unified has become eligible for CALPADS Differentiated Assistance due to an inability to certify the Fall 1 data submission by final deadlines. This reflects challenges such as unresolved fatal errors, data quality issues, missed milestones, and reliance on last-minute corrective actions. These challenges have persisted in successive reporting cycles, suggesting that the issue is not isolated but instead driven by underlying gaps in roles, processes, accountability, and the operational readiness needed to ensure timely and accurate CALPADS data certifications.

### **Data Challenge / Improvement Opportunity**

#### *Data-Informed Decision-Making*

Key operational, fiscal, and strategic decisions at Fictitious LEA are not consistently guided by reliable, timely, and trusted data. Decision-makers report limited confidence in available reports and dashboards, inconsistent data definitions across systems, and difficulty accessing information as decisions are being made. As a result, decisions are frequently driven by anecdotal information, urgency, or historical practice rather than by shared evidence. These challenges indicate systemic issues related to data governance, data quality, data accessibility, and organizational data literacy rather than a lack of data itself.

# Notes



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# Data Initiatives Charter Template

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*A Framework for defining purpose, scope, sponsors, milestones, and deliverables.*

## 1. Initiative Overview

<b>Initiative Title</b>			
<b>Date Initiated</b>		<b>Version/Revision</b>	
<b>Primary Author / Owner</b>			
<b>Sponsoring Department(s)</b>			
<b>Primary Stakeholders</b>			

## 2. Problem Statement / Opportunity

*Describe the problem or opportunity this initiative addresses. Use concrete examples or data evidence.*

## 3. Vision and Desired Outcomes

<b>Vision Statement</b>	
<b>Primary Objectives</b>	<ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul>
<b>Strategic Justification</b>	

# Data Initiatives Charter Template

## 4. Scope Definition

Category	In Scope	Out of Scope
Systems / Data Sources		
Departments / Roles		
Deliverables / Outputs		

## 5. Guiding Principles

Principle	Description
Transparency	
Collaboration	
Simplicity	
Sustainability	

*These guiding principles define the shared values and behaviors that shape how data initiatives are planned, implemented, and sustained. They ensure that every effort, whether technical, procedural, or cultural – remains grounded in trust, clarity, and collective responsibility.*

## 6. Governance & Roles

Role	Name / Position	Responsibilities
Executive Sponsor		
Project Lead		
Data Steward(s)		
Advisory / Working Group		
Technical Support		

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# Data Initiatives Charter Template

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## 7. Deliverables & Milestones

Deliverable	Description	Owner	Target Date	Status

## 8. Key Risks and Mitigations

Risk	Potential Impact	Mitigation Strategy

## 9. Measures of Success

Metric / Indicator	Target / Threshold	Source / Method

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# Data Initiatives Charter Template

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## 10. Communication & Change Management

*Define how updates, training, and celebrations will occur throughout the initiative.*

Component	Description/Example	Owner/Responsible	Frequency/Timing
Stakeholder Communication Plan			
Training & Support			
Recognition & Celebration			
Feedback & Continuous Improvement			

## 11. Sustainability and Transition Plan

*Describes how outcomes will be maintained once the initiative concludes. Include ownership, reviews, and documentation plans. Or use **Appendix A** – For a more formalized table format.*

# Data Initiatives Charter Template

## 12. Approval Signatures

Name	Title	Signature	Date

## Appendix A – Sustainability Worksheet (Section 11 Advanced)

*For teams ready to operationalize their sustainability planning, use this structured worksheet to define ongoing ownership, review cycles, and accountability. Type over the examples below.*

Sustainability Component	Description/Details	Responsible Role(s)	Review Frequency / Date
<b>System Ownership</b>	Identify who will maintain access, configurations, and updates.		
<b>Process Ownership</b>	Define who ensures workflows continue as designed.		
<b>Training &amp; Onboarding</b>	How new staff will be trained in any updated processes.		
<b>Documentation &amp; Knowledge Management</b>	Where documentation lives and how it's updated.		
<b>Continuous Improvement</b>	Schedule for periodic review and enhancement.		

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# Universal Supports Toolkit

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## Data Management Maturity Model



### View the Data Performance Landscape

The CSIS Data Management Maturity Model (CDM3) can be used in combination with the CSIS Data Management Maturity Assessment (CDMA) to evaluate and set growth targets for data management processes. The CDM3 can also be used as a standalone tool for a perspective on performance levels of data management programs at education agencies across California.



### Determine Your Baseline

The CSIS Data Management Maturity Assessment Tool can be used by any LEA to determine their baseline data management performance and practices, and set targets for growth.

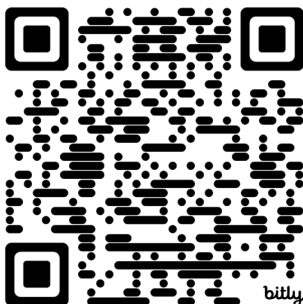
## Data Management Assessment

## Root Cause Analysis Guidebook



### Perform a Root Cause Analysis

A facilitation guide for root cause analysis to address reasons for any district or COE that becomes eligible for CALPADS DA, or has determined a need for data management improvement. The root cause analysis guidebook is most appropriate for small school districts, and contains a more limited scope than the CSIS Data Management Maturity Assessment (CDMA) that is more appropriate for medium to large districts and county offices.



<https://csis.fcmat.org/calpads/universal-supports-toolkit>

***Thank You For Attending!***



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