



From Data to Action: 2025 CCA Data Days

July 28-29
Denver, CO

Agenda & Resources:
CompleteCollege.org/DataDays2025

Lead sponsor:



Nuventive™
The Data-Informed Improvement Company™

Additional support by:

ECMC
Foundation

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Measure What Matters

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How CCA Gets Results: Systems Change



Policy

**Accelerating Change
& Removing Barriers**



Perspective

Challenging Assumptions
&
Changing Mindsets



Practice

**Strengthening
Institutions around
Student Experience**

A culture of data driven
decision making

Lagging
indicators

But FERPA!

I have your
sandwich

Data

Don't weaponize data

Data

A culture of data driven
decision making

Data

Metrics

Data

Data

Reports in a

OOPS I'm In the Wrong Slide 😞

Have you considered
looking at
the....DATA!!?!?

e PDP

Data

Metrics

Data

Data

You can't manage what
you can't measure!

Data

Data

KPIs

Leading
indicators

Where did I put my sandwich





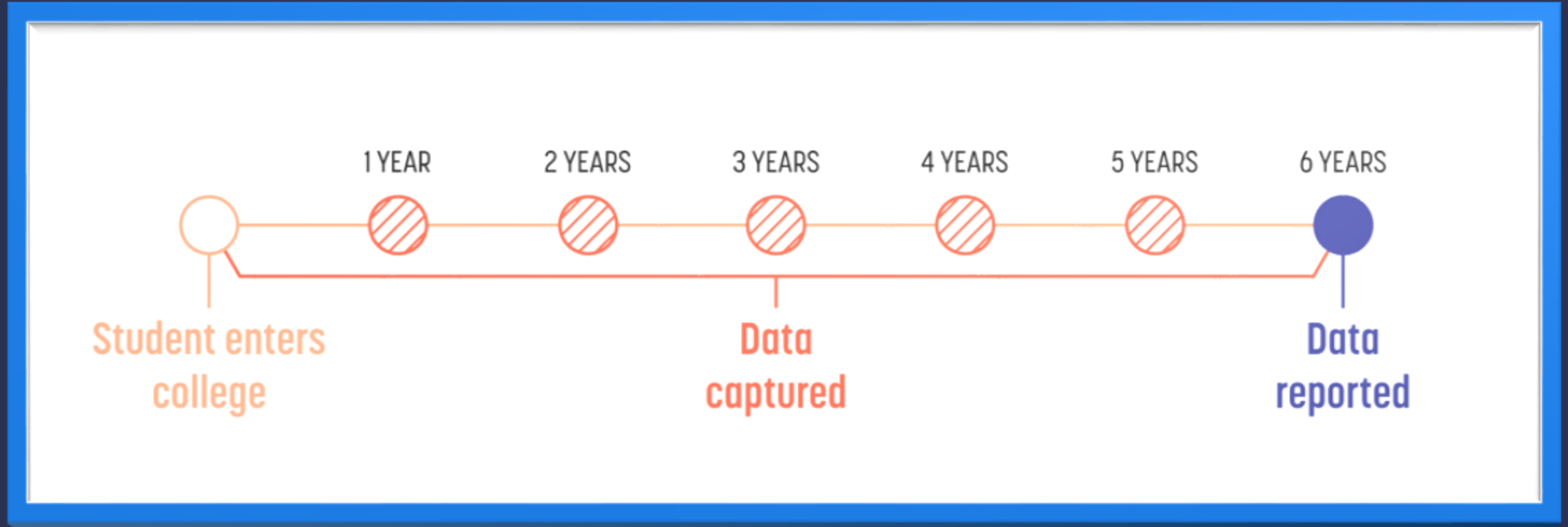




A framework allows you to see how everything comes together to create a picture of student success.



YOU HAVE NO WAY OF KNOWING WHAT'S WORKING – AND WHAT ISN'T



TOO LITTLE, TOO LATE



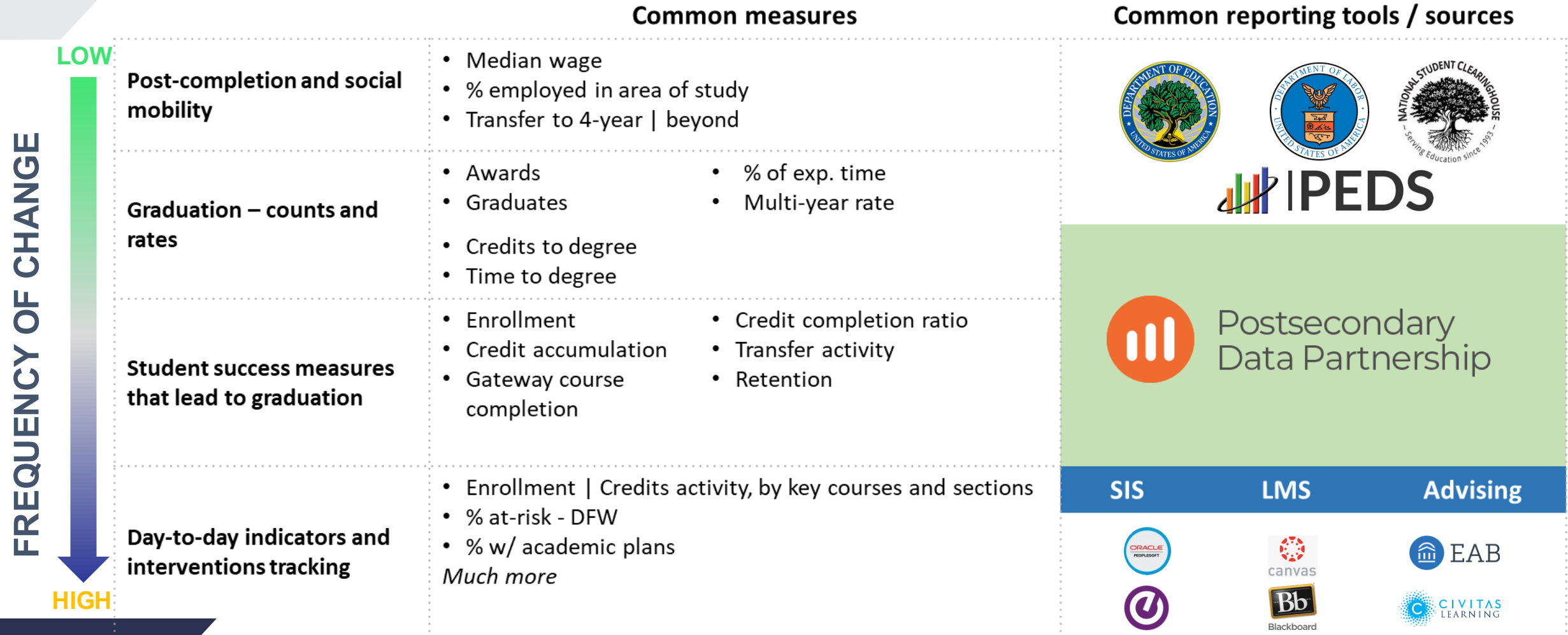
“It is a capital mistake to theorize before one has data.”

Sherlock Holmes

Rethinking Metrics

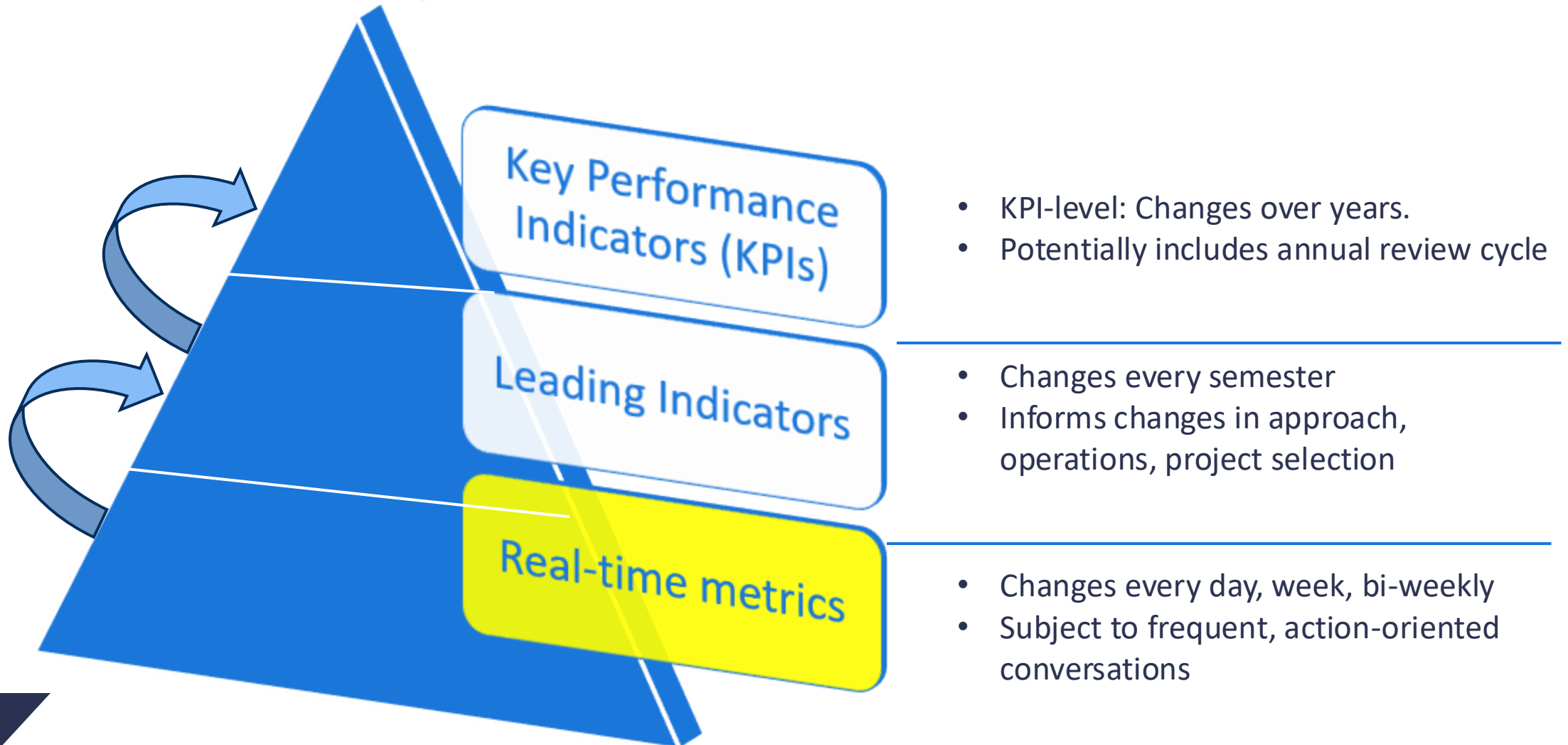


Translating data to action – at all levels



Structuring Data:

KPIs, Leading Indicators, and Real-Time Metrics



Choose the best KPI's to align with your mission, needs, and capacity

- Metrics that align with your college's strategic plan
- Metrics derived from best practice
- Metrics about your college you already make public



What is a Leading Indicator?

Leading indicators change more frequently (e.g., from semester to semester). The leading indicators inform the movement of the KPIs and are used regularly to assess and improve services to students.

Why You Need Both: A Feedback Loop for Student Success

- **Leading indicators** tell you where to focus your support.
- **Lagging indicators** tell you if it made a difference.
- Both should be reviewed each semester to **guide, evaluate, and improve** strategies.

It's About When You Measure It: Not in the Name

Focus on
Timing,
Not Labels

For this work, the value of a metric lies in when you measure it and what it helps you do—not whether it's called *leading* or *lagging*.

Ask yourself:

- Does this metric help me intervene in time to support students?
- Or does it help me evaluate whether past efforts worked?






What is a Real-Time Metric?

Real-time metrics inform leading indicators and KPIs. They are a continuous and current snapshot of campus; they might change daily, weekly, or monthly.

Since they are updated frequently, they are used to monitor ongoing performance and make immediate adjustments. For example, real-time metrics for retention rates might include daily reviews of re-enrollment patterns during a registration cycle.

What Does a Real-Time Metric Look Like in Practice?

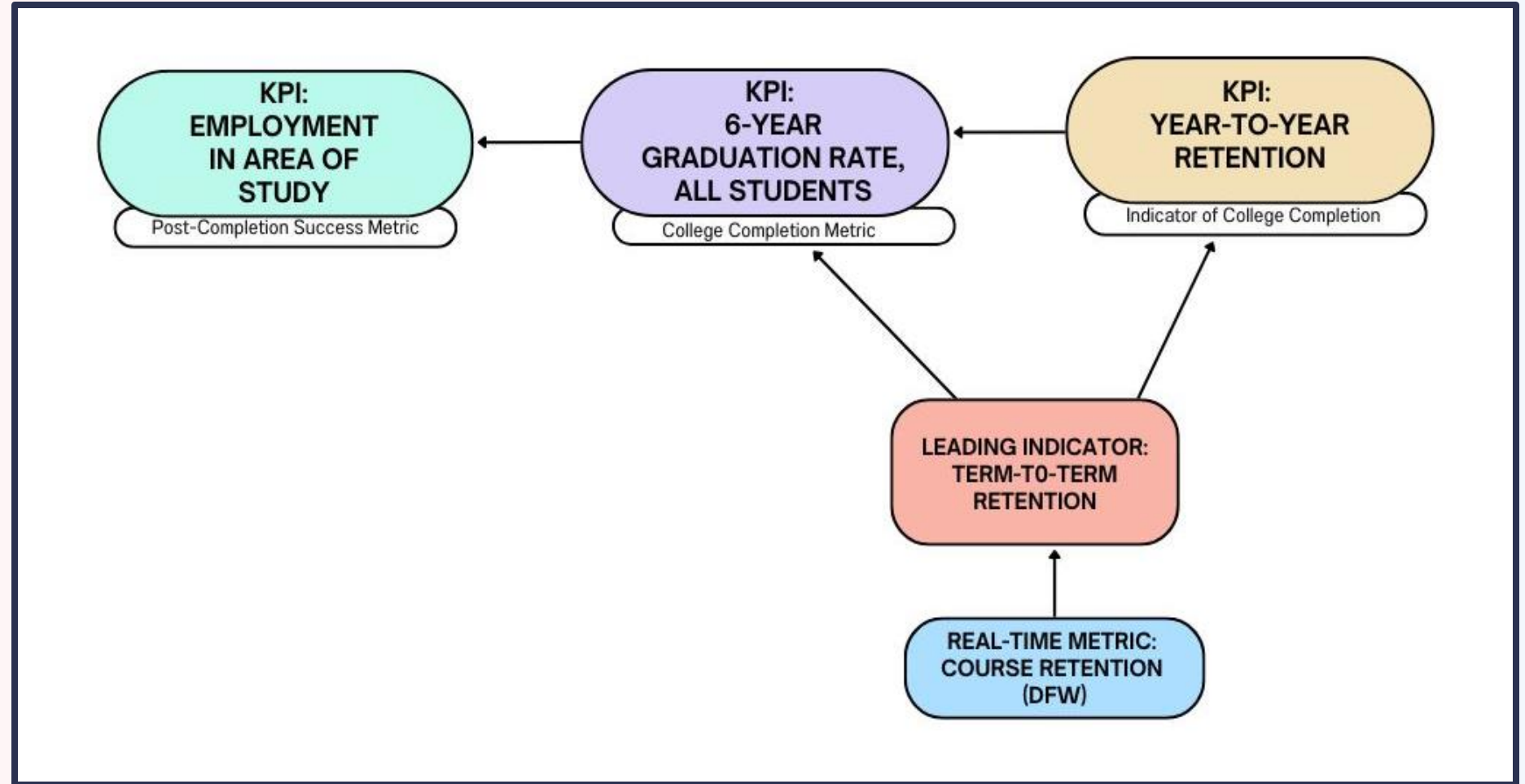
Real-time metrics vary by institution, but here are some actionable examples:

-  **Advising:** % of students who have met with an advisor this week
-  **Registration:** Number of students enrolled per day during open registration
-  **Gateway Courses:** Attendance rates or in-progress grades in math/English
-  **Tutoring Usage:** Weekly counts of tutoring appointments by course
-  **Student Engagement:** Logins to learning platforms or student portals

These metrics help you **see what's happening now** and act before the semester ends.

Metrics are deeply interconnected.

- KPIs can influence one another.
- Some metrics appear in multiple categories.



Metrics Tree Tool Kit



Brainstorming KPIs Tool

A	B
Identify KPIs	
Brainstorm KPIs	6 to 10 KPIs
	KPI 1
	KPI 2
	KPI 3
	KPI 4
	KPI 5
	KPI 6
	KPI 7
	KPI 8
	KPI 9
	KPI 10

Example: KPIs Brainstorm

A	B
Identify KPIs	
Brainstorm KPIs	6 to 10 KPIs
Graduation Rates	Graduation Rates
Retention Rates	Retention
Median Earnings After Graduation	Transfer
Transfer Rates	Median Earnings After Graduation
Employment Rate in Field	Enrollment
Student Engagement	Student Engagement
Enrollment	KPI 7
Number of Degrees Awarded	KPI 8
Classroom Engagement	KPI 9
Instructional Cost	KPI 10
Course Completion Rates	
Student Outcomes	
Acceptance Rates	
Advising	

Leading Indicator Brainstorm

A	B
Identify Leading Indicators	
KPI 1	
Leading Indicators Brainstorm	6 to 10 Leading Indicators
	LI 1
	LI 2
	LI 3
	LI 4
	LI 5
	LI 6
	LI 7
	LI 8
	LI 9
	LI 10

Example: Leading Indicator Brainstorm

Identify Leading Indicators	
4-Year and 6-Year Graduation Rates	
Leading Indicators Brainstorm	6 to 10 Leading Indicators
First-Year Retention Rate	First-Year Retention Rate
Term-to-Term Retention	Term-to-Term Retention
Credit Completion Rate per Semester	Credit Completion Rate per Semester
Completion of Gateway Courses in First Year	Completion of Gateway Courses in First Year
Advising Participation	Year-to-Year Retention
Number of Repeated Courses	LI 6
Average Credit Load	LI 7
Year-to-Year Retention	LI 8
Cumulative and Semester GPA Trends	LI 9
Rate of Change in Major	LI 10
Participation in First-Year Experience (FYE) Programs	
Timely FAFSA Renewal & Financial Aid Completion	
Tuition Payment Status & Holds on Student Accounts	
Number of Students on Academic Probation	
STEM Course Persistence Rates	
Number of Students with Incomplete Grades	

Real-Time Metric Brainstorm

A	B
Identify Real-Time Metrics	
KPI 1, LI 1	
Real Time Metrics Brainstorm	Real Time Metrics Focus
	RT 1
	RT 2
	RT 3
	RT 4
	RT 5
	RT 6
	RT 7
	RT 8
	RT 9
	RT 10
	RT 11
	RT 12
	RT 13
	RT 14
	RT 15

Example: Real-Time Metric Brainstorm

Identify Real-Time Metrics	
4-Year and 6-Year Graduation Rates, First-Year Retention Rate	
Real Time Metrics Brainstorm	Real Time Metrics Focus
Class Attendance Rate	Class Attendance Rate
Percentage of Students Missing Two or More Classes in a Row	Course Logins & Online Participation in Classes (LMS Data)
Course Logins & Online Participation in Classes (LMS Data)	Assignment Submission Rates
Assignment Submission Rates	Student-Initiated Office Hour Visits
Mid-Week Class Engagement (Faculty-Reported)	Drop, Fail, or Withdrawal Rates (DFW)
Students Requesting Extensions or Missing Deadlines	Library Check-Ins & Resource Usage
Student-Initiated Office Hour Visits	Tutoring Services Utilization
Drop, Fail, or Withdrawal Rates (DFW)	First-Year Students Engaging with Peer Mentors
Library Check-Ins & Resource Usage	Weekly Check-Ins with Academic Advisors
Tutoring Services Utilization	Grade Monitoring beyond Midterms
First-Year Students Engaging with Peer Mentors	Real-Time Check-Ins with Emergency Financial Assistance Office
Students with Outstanding Tuition Payments After Due Dates	RT 12
Real-Time FAFSA Completion Tracking	RT 13
Emergency Grant Applications in a Week	RT 14
Number of Students on Payment Plans Who Miss Payments	RT 15
Mental Health & Counseling Appointments Booked Per Week	
Weekly Check-Ins with Academic Advisors	

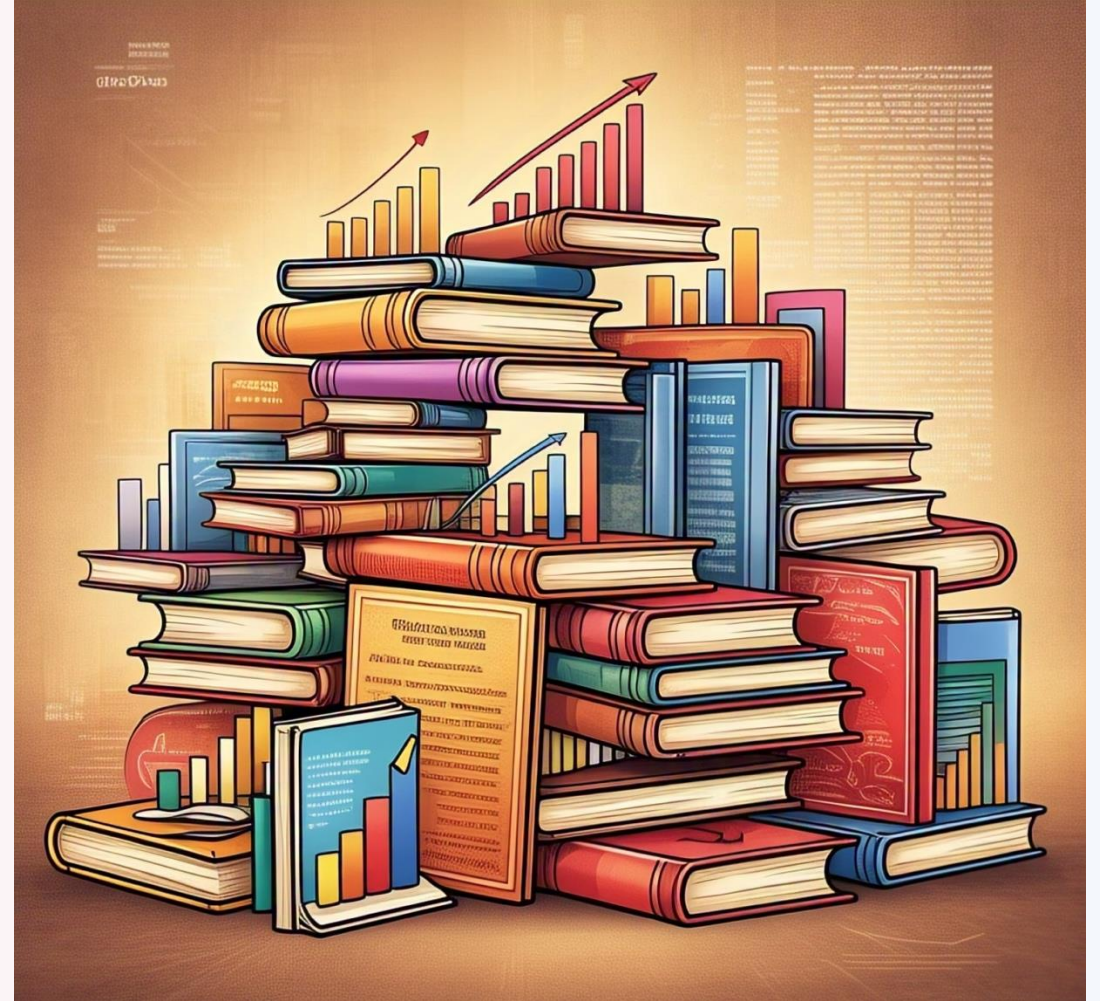
What did you discover when you filled out the tree at the pre-conference yesterday?



Common Pitfalls when Creating a Data-Driven Culture

- Tracking what's easy instead of what's meaningful
- Vague KPIs like "student engagement" with no definition
- Data hoarding
- Misaligned actions

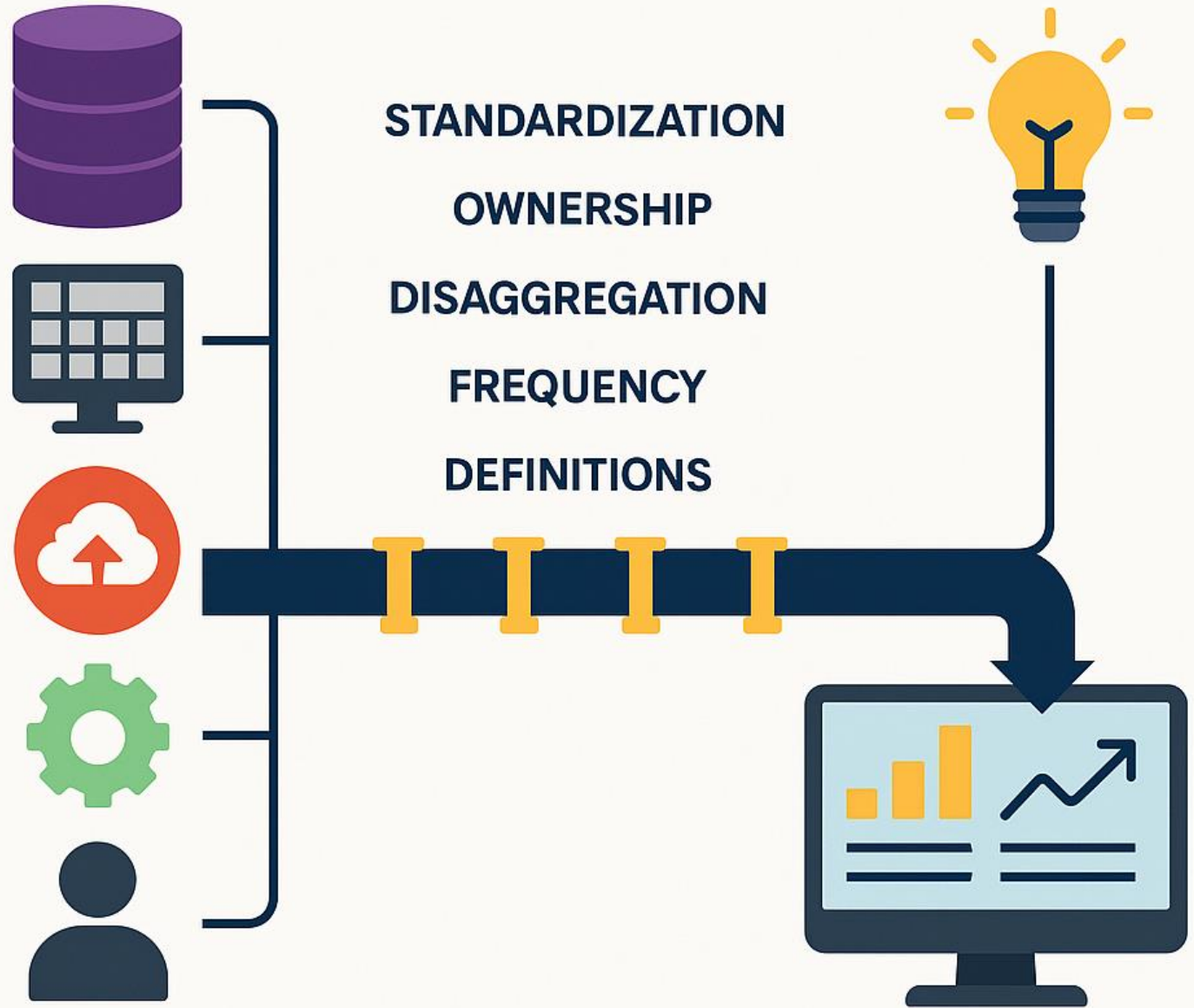
Too often,
institutions let data
availability dictate
their metrics,
creating a
backwards system
where they measure
what is easy rather
than what matters.



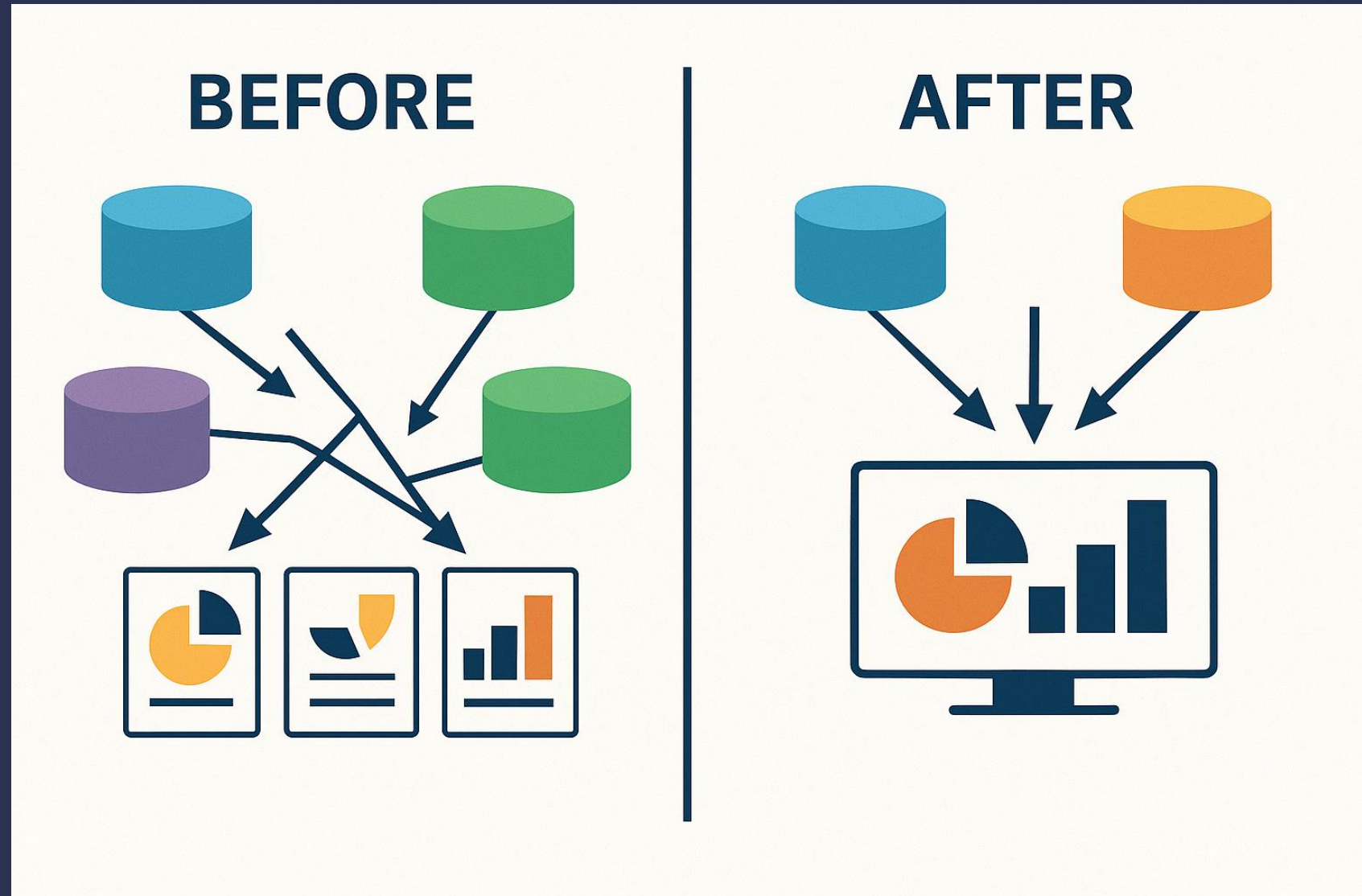
Don't let
perfect be
the enemy
of good!



Pipeline to Purpose



Pipeline to Purpose



Having dashboards at all metric levels—KPIs, leading indicators, and real-time metrics **with consistent definitions**, helps to ensure productive, data-driven conversation. Without alignment, data loses its value, causing stakeholders to end up spending more time debating what the numbers mean, rather than focusing on actionable items to improve student success



“By visualizing information, we turn it into a landscape that you can explore with your eyes. A sort of information map.”

David McCandless

Considerations to Get to Great Data



DEFINE
METRICS
AND
SOURCE
DATA



STANDARDIZE
DATA
METHODOLOGY
AND DATA
REPORTS



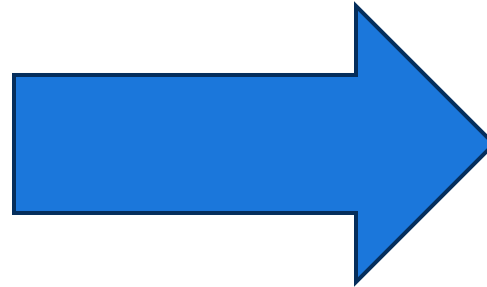
DEMOCRATIZE
DATA ACCESS



SAFEGUARD
PRIVACY WHILE
PROVIDING
ACCESS TO
DATA

Elements to Include in a Data Dictionary

- Metric Name
- Definition
- Calculation Method
- Data Source/System
- Frequency of Update
- Owner/Point of Contact



- Link it to dashboards, agendas, and reports
- Review annually as part of performance dialogue prep
- Share with new employees and external partners for transparency

Does your campus have a data dictionary?



Standardizing Data



Why Standardization Matters

- **Consistency:** Ensures that all stakeholders interpret the metric uniformly.
- **Comparability:** Allows for accurate comparisons over time and across departments or institutions.
- **Transparency:** Facilitates clear communication of data findings to external audiences.
- **Decision-Making:** Supports informed strategic planning and policy development.

The Pitfalls of Non-Standardization

- **Misinterpretation:** Different departments may report varying retention rates, leading to confusion.
- **Ineffective Strategies:** Policies based on inconsistent data may fail to address the actual issues.
- **Loss of Credibility:** Stakeholders may lose trust in reported data, hindering future initiatives.
- **Compliance Risks:** Inaccurate reporting can lead to non-compliance with accreditation or funding requirements.

What owns the data?
Who needs the data?



Importance of Data Democracy

When only a few people "hold the keys" to data, opportunities for innovation, accountability, and ownership are lost. Data democracy puts insights in the hands of those closest to students—faculty, advisors, department chairs—so they can act.

Core Components of Data Democracy

- **Accessibility:** Ensuring that data can be accessed by stakeholders regardless of their position or expertise.
- **Understandability:** Providing data in a format that is easy to comprehend, often through visualizations and summaries.
- **Usability:** Empowering users with the skills and tools necessary to extract meaningful insights and act on them.
- **Transparency:** Making data processes and methodologies open to scrutiny to build trust among stakeholders.

Benefits of Data Democracy

- **Enhanced Decision-Making:** Stakeholders at all levels can make informed decisions based on accurate data.
- **Improved Student Outcomes:** By identifying trends and issues early, institutions can implement interventions to support student success.
- **Increased Collaboration:** Departments can work together more effectively when data is shared openly.
- **Greater Accountability:** Transparent data practices hold all parties responsible for outcomes.

Strategies for Promoting Data Democracy

- **Encourage a Culture of Inquiry:** Promote an environment where questioning and exploring data is valued and supported.
- **Regularly Review and Update Data Practices:** Continuously assess and refine data processes to adapt to changing needs and technologies.

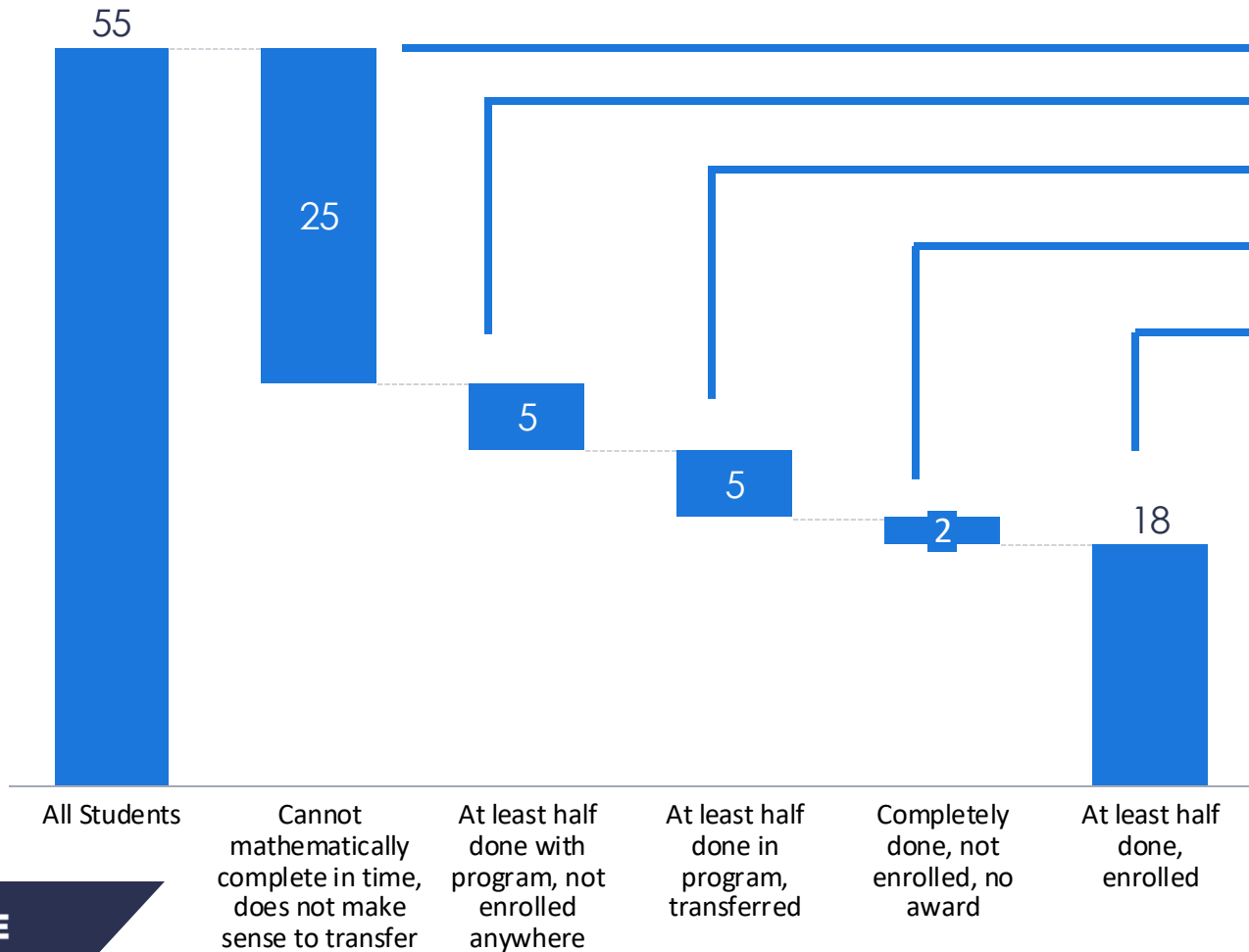
Data collection alone is not enough.



Getting to smart metrics for completion management dashboard

Do degree audits in the tool of your choice, or manually

Divide overall exercise for priority cohorts,
including for other metrics



If enrolled, move to retention metrics, if not...

...Win back Some-College-No-Credential

...Reverse transfer for addition to grad metric

...Award program of study, check on transfer

Highest Priority

- Intersects with retention plays
- Should have education plans to completion



Why Action Planning Matters

The Problem:

Too often, performance dialogues end with great discussion but no follow-through.

The Solution:

Action planning ensures that conversations lead to decisions—and decisions lead to change.

Key Benefits:

- Translates data into strategy
- Assigns responsibility
- Sets timelines and success criteria

Key Components of an Effective Action Plan

Action Plan

- **Goal:** What are you trying to improve?
- **Metrics:** How will you measure success?
- **Strategy:** What intervention will address the issue?
- **Owner:** Who is responsible for execution?
- **Timeline:** When will you start, check in, and complete?
- **Status Tracker:** What's the current progress?

Pro Tip:

Use **SMART** goals—**S**pecific, **M**easurable, **A**ssignable, **R**ealistic, **T**ime-related.

Momentum Wheel





Thank You

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