University of Colorado **Denver**
**CU IN THE CITY**

**Decision Support Toolkit**
Version 1 Release

# DSTk v1 Modules

## Unit Profile

**Provides an overall outlook on a unit's business inputs/outputs**

**Metrics:**

Course Credit Hours and Revenue, Student Headcount, Faculty/Staff Headcount and Expenditures

### School/College Profile

- *School/College Comparison*
- *High-level Trends*

### Department Profile

- *Formerly "Scenario Planner"*
- *Department Comparison*
- *"The Breakdown" provides analysis comparing costs/benefits by department*
- *Course and Program Specific Comparison*

## Program Performance

**View program success and find areas of opportunity**

**Metrics:**

Student Headcount, Credit Hour and Revenue Contribution, Program Flows, Demographics

### Level- Set Page

- *High-level overview of primary program related detail*
- *School/College Comparison*
- *Department Comparison and Analysis*

### Detail Page

- *Student headcount and credit hour contribution by Student Type*
- *Program Flows – shows where students are going*
- *Demographics – who are your students and where to they come from*

## Course Efficiencies

**Analyze efficiencies in course offerings**

**Metrics:**

Credit Hours, Sections Offered, Course Fill Rates, Modality Utilization, DFWs

### Level- Set Page

- *High-level overview of course related detail*
- *School/College Comparison*
- *Department Comparison and Analysis*

### Detail Page

- *Department and Subject Comparison*
- *Collapsible Course Analysis*
- *Section Demand Calendar*
- *Modality Insight*
- *Success Detail*

## Instruction Insights

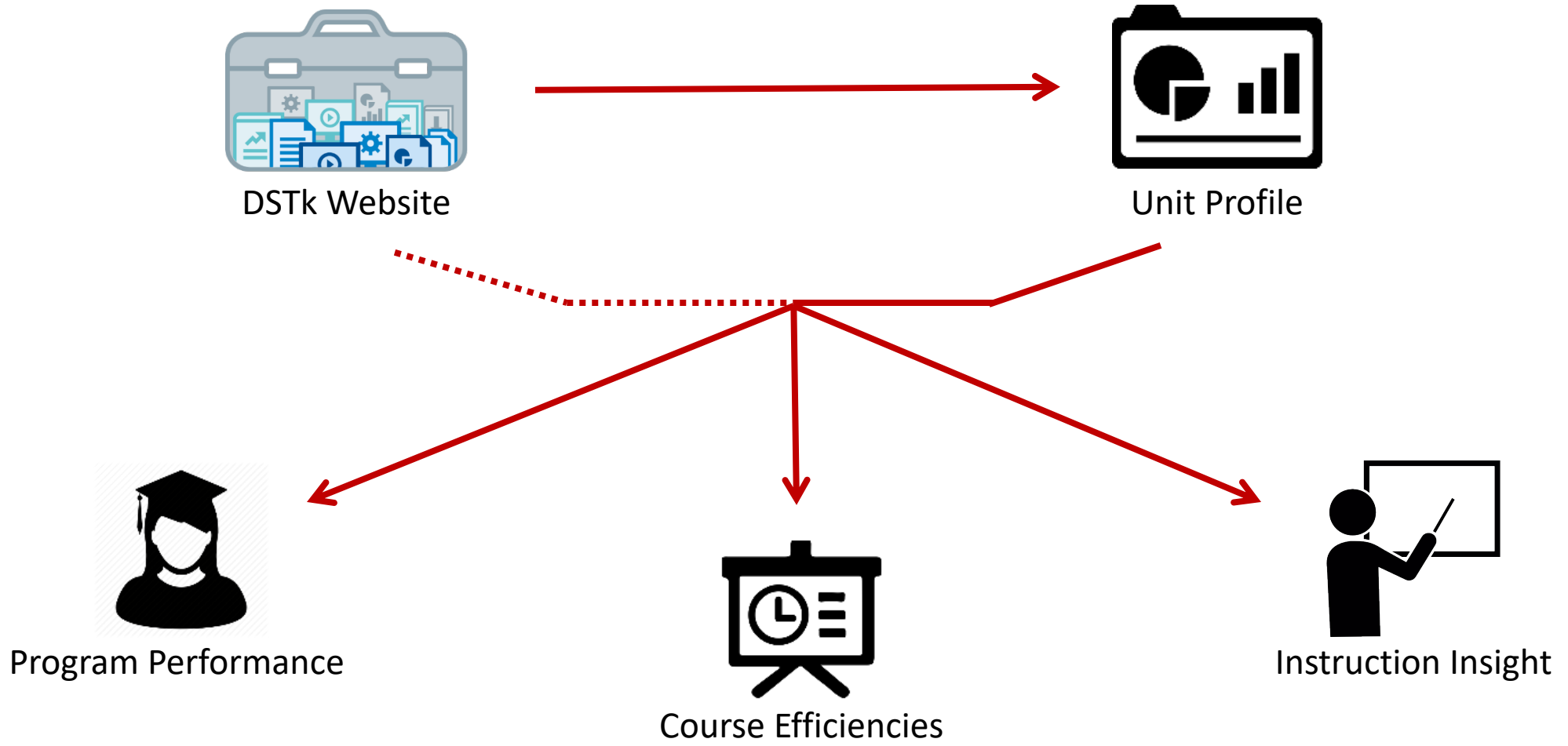**How are people resources being utilized?**

**Metrics:**

Headcount and FTE, Workload, Instruction Expenditures

### Main Page

- *School/College Comparison*
- *Instruction by Rank*
- *Faculty Expenditures*
- *Instructional Capacity Gap*
- *Department Breakdown*

**Decision Support Toolkit**

# DSTk v1 Diagram

# **Website**

**https://www1.ucdenver.edu/offices/institutional-research-and-effectiveness/decision-support-toolkit**

- The website serves as a starting place to each of the DSTk modules

- Stores training resources

- The DSTk website is housed under the Office of Institutional Research webpage

- For easy access, Google:
  "CU Denver Decision Support Toolkit"

# Unit Profile

## Start with the **Unit Profile**

- Gain insight on high level stats from all parts of your business with the **School/College Overview**
    - View your data as compared to the other Schools and Colleges
    - Keep track of your high-level metrics and trends

- Dive deeper the **Department Detail**
    - Formerly the **FY 20-21 Scenario Planning Resource**
    - Sort through department level data
    - Use **The Breakdown** to view analysis and trends on department level detail
    - Dive even further into program and subject level comparisons

Once you've found some areas to dig into, dive deeper with the Program Performance, Course Efficiencies, and Instruction Insight modules

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# Course Efficiencies

Get into course offerings with the **Course Efficiencies** module

- Use the **Level-Set** page as a place to start to understand your course level data
    - Jump to **The Breakdown** section to start comparing stats by department

- Dig into more detailed analysis all the way down to the subject level on the **Detail** page
    - Look at fill rates and section utilization
    - Find savings with **Collapsible Course** analysis
    - Narrow down high and low demand courses
    - Know when to offer classes with the **Course Demand Calendar**
    - Learn which modalities work best
    - Identify areas where students are most successful

# Program Performance

Identify your thriving programs with the **Program Performance** module

- The **Level-Set** page serves as a starting place in understanding your program level data
  - **The Breakdown** sets you up to start comparing stats by department

- Use the **Detail** page to get dive deeper into more granular data at them program level
  - View headcount trends by different groups of students
  - Understand credit hour and revenue contributions
  - Use **Program Flows** to view where students are end up from one semester to another
  - Find out where your students are coming from with the High School/Transfer College Map

# Instruction Insight

Understand resource utilization
with the **Instruction Insight** module

- Understand your instructional costs
  - As a percent of total expenditures
  - In terms of cost per credit hour

- Look at credit hours and sections being taught by faculty rank

- View trends on workload by rank
  - Use the **Instructional Capacity Gap** analysis to compare target workload to actual

- Compare departments through all stats within this module and see how they've been trending

# What's Next?

**Detailed Walkthroughs / Feedback**
- Look out for calendar invites for each of the four modules
- We will do in-depth demonstrations and solicit feedback

**Contact David Doig with Feedback, Session Requests, and User Access Requests:**
**david.doig@ucdenver.edu**

**Please reach out to set up an individual/tailored session**
- Please reach out with questions you have on anything regarding DSTk content
- We're happy to do in-depth, tailored walkthrough with your units. Please reach out to set up a session
- Is there something you'd like to see that's not included in one of our tools? Feel free to request an enhancement!

**Other users?**
- Currently, DSTk is limited to those with approved access. Please reach out to David to add additional user

## On to the Demonstrations

# Data Diagram

## Source Diagram

Marrying Student Records with Financials and HR Data

Human Resources
(CIW and OIRE)

Budget and Finance
(CIW)

Mapping Source

Various Merged Analytical Tables

Student Records
(OIRE)

Student Level

Class Level

Tuition Rate Tables

**DSTk**
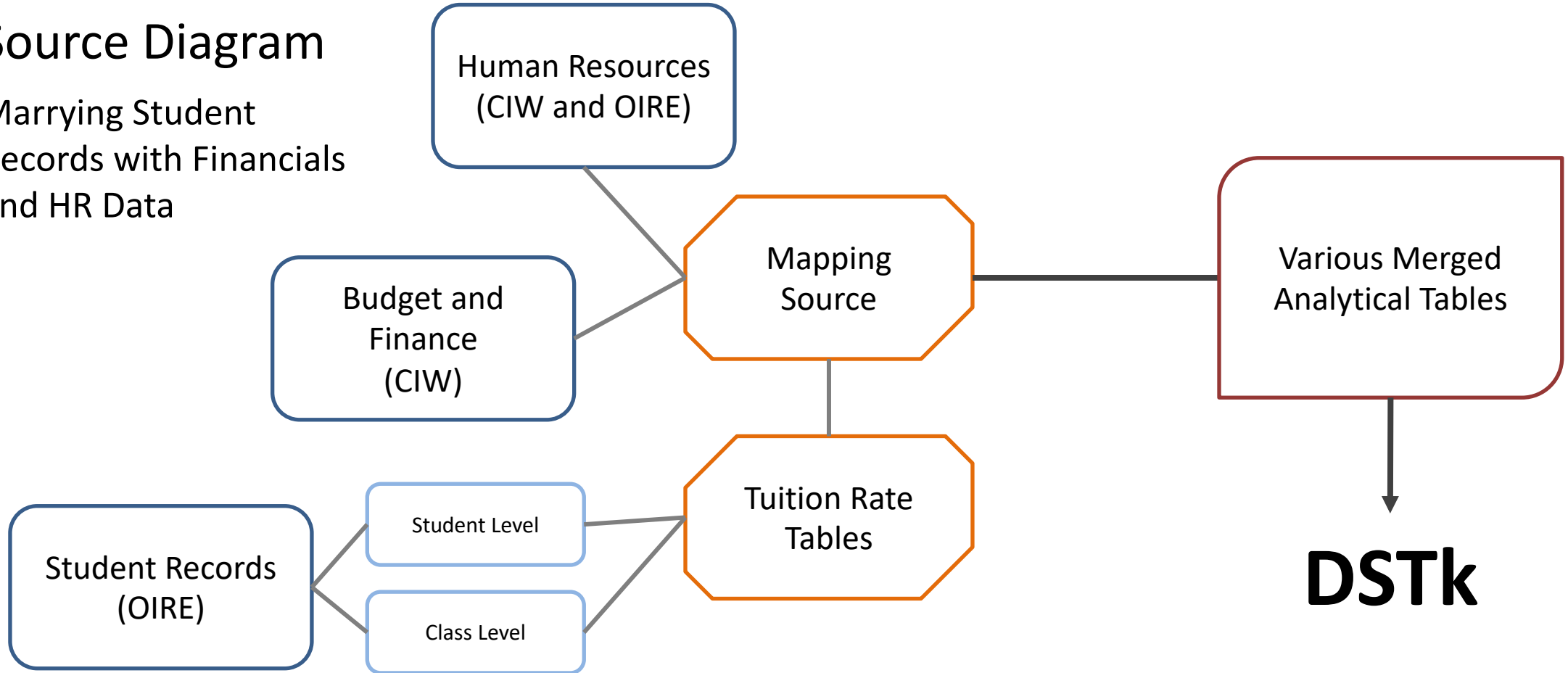
# Technology

**Leveraging OIT Tools For Seamless Updates**

- In its optimal state (beyond version 1), the Toolkit will utilize Exasol and Mulesoft – enterprise data movement and warehousing tools provided by OIT

- This will allow for completely hands-off data refreshing and automation, and for some applications, near real-time data

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# Beyond DSTk v1 Launch

## Outreach, Engagement, Maintenance, Improvements

### Short Term (Q2 FY 2021)

- **Outreach and Training** (October 2020)
  - In-depths demos of each of the modules
  - Offer consultation to Schools and Colleges on
- **Collect Feedback** (November 2020)
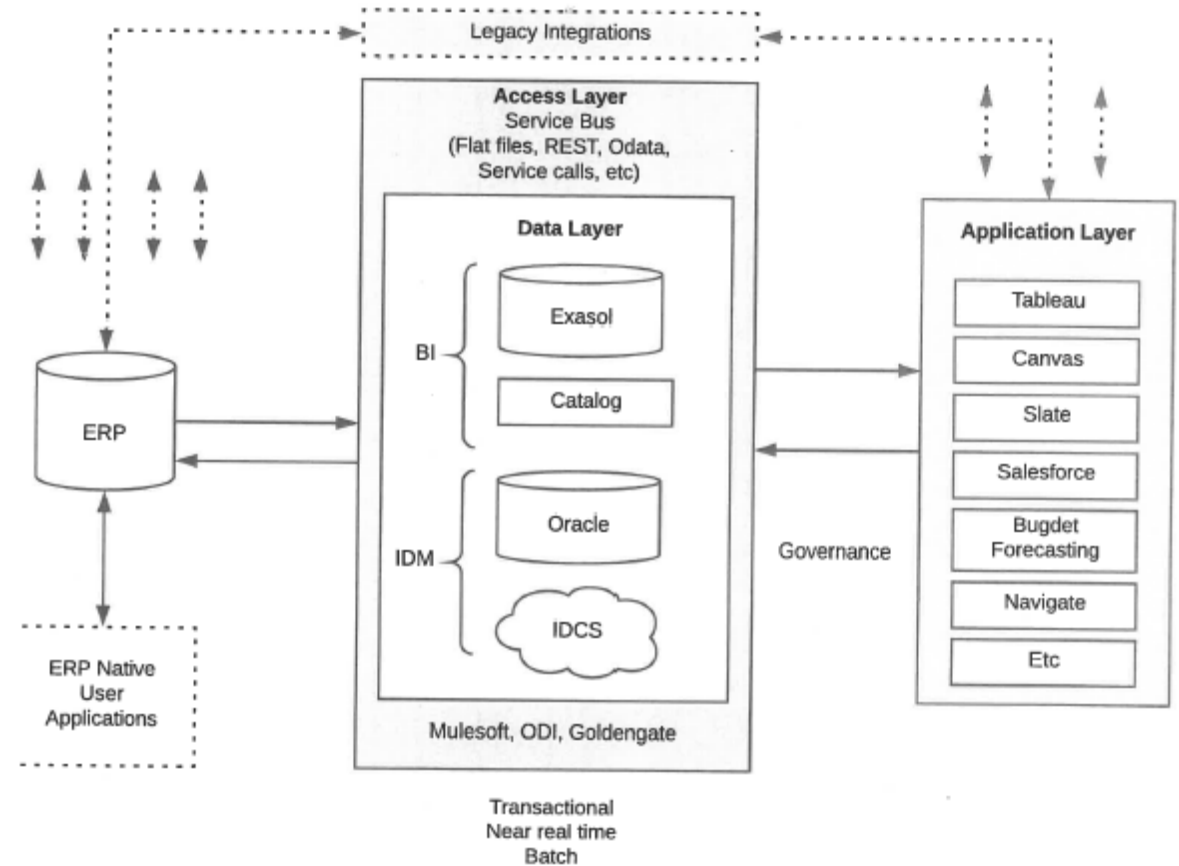  - Hold feedback sessions after demos
- **Enhancements and Modifications** (November and December 2020)
- **Data Movement and Infrastructure**

### Medium Term (Q3 & Q4 FY 2021)

- **Version 2 Planning. Areas of focus:**
  - D2/Extended Studies
  - Central Administration Modules
  - Forecasting and machine learning
- **Communications**
  - Blog
  - Townhalls
  - Case studies
  - Consultation

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