Data Integration and Analysis

ANNETTE BEITEL

PRESENTATION AT CAL TF PAC

JUNE 20, 2023

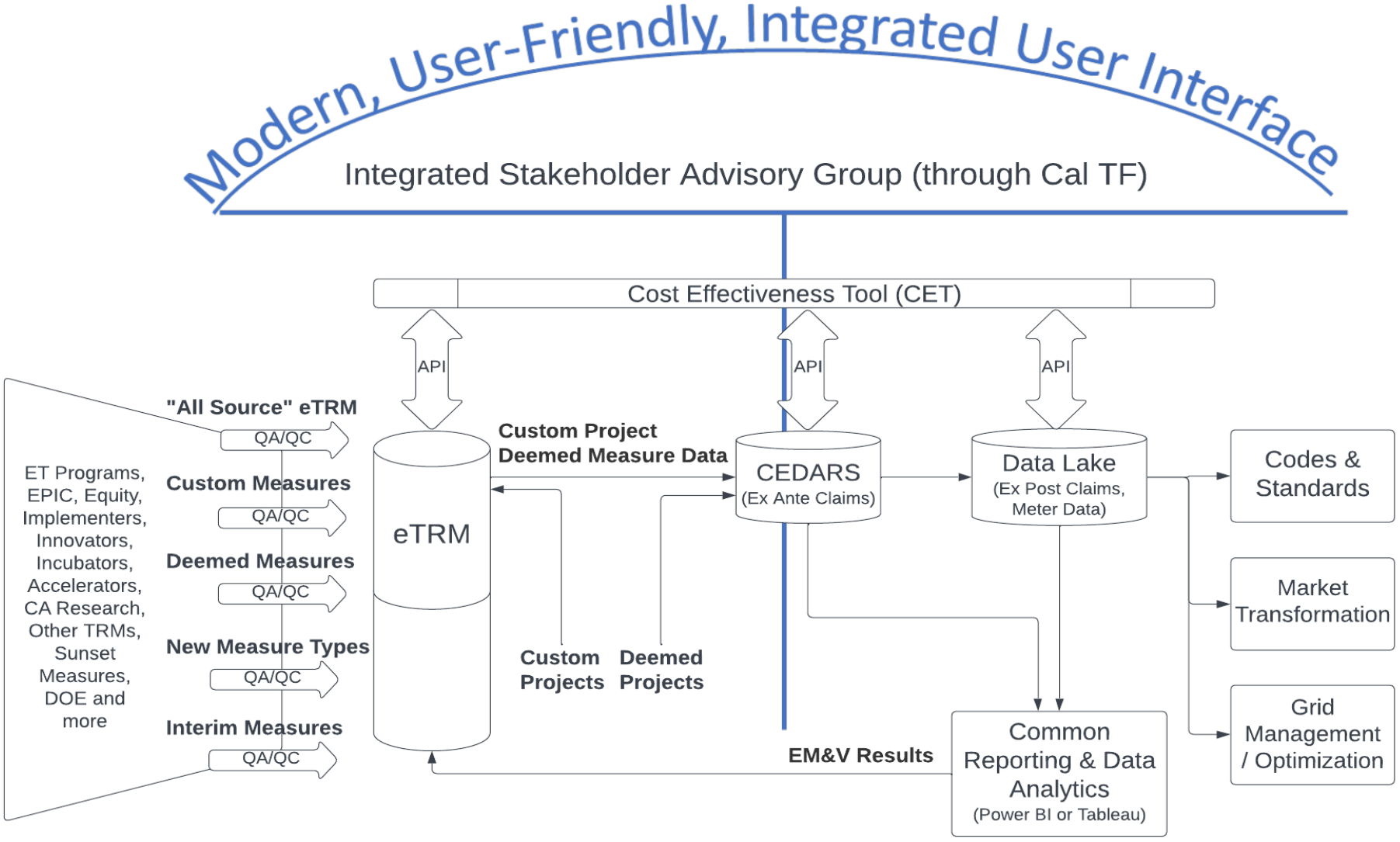
Business Case

Reduce costs, time and errors associated with EE/DR data administration

Enable data analytics using commercially-available tools and through combining EE/DR data with other federal, state and possibly private data sources

- Background
- Upcoming Data Charette
- Key Emerging Issues Identified to Date

Modern, User-Friendly, Integrated User Interface

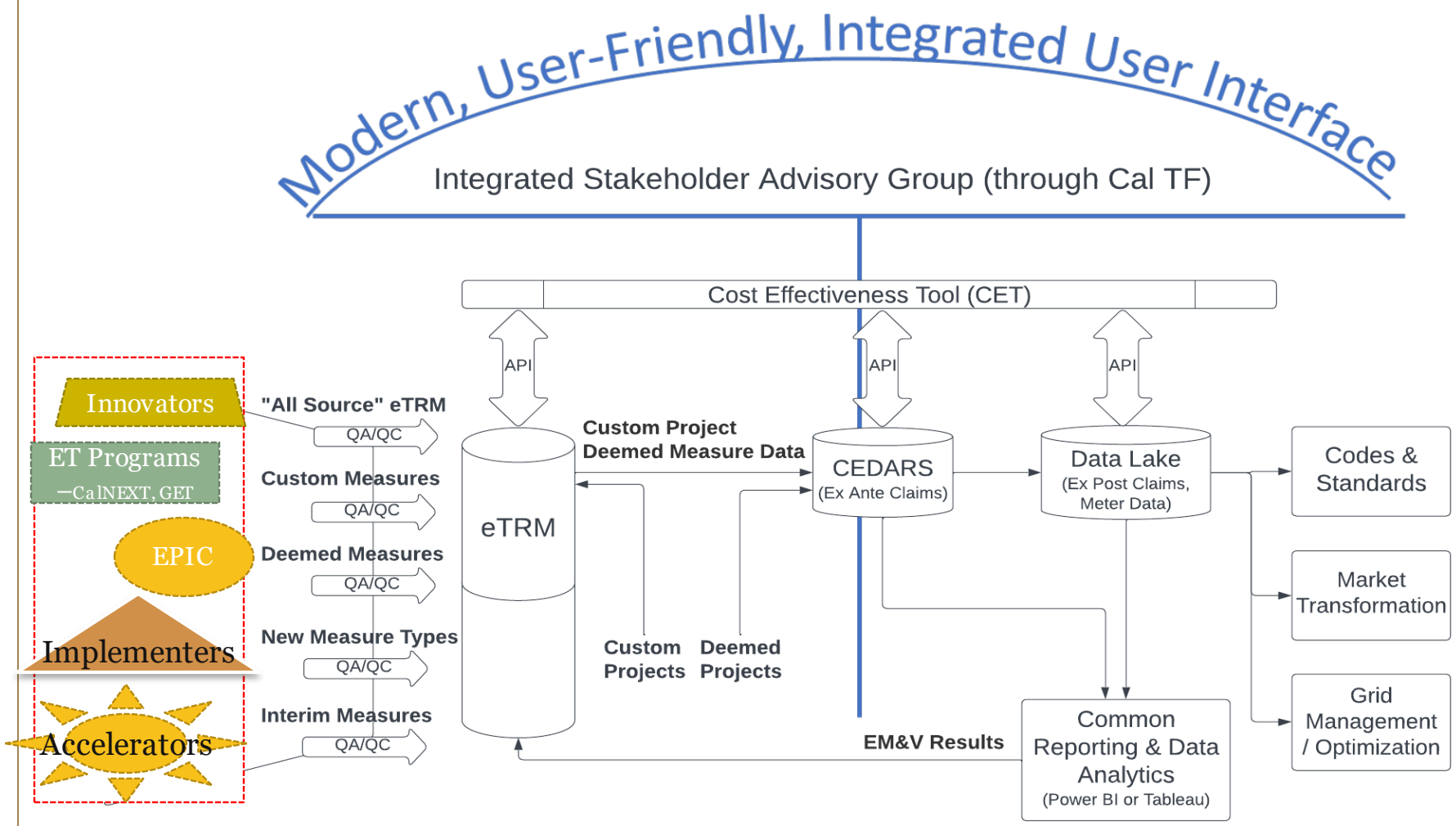


Bottlenecks

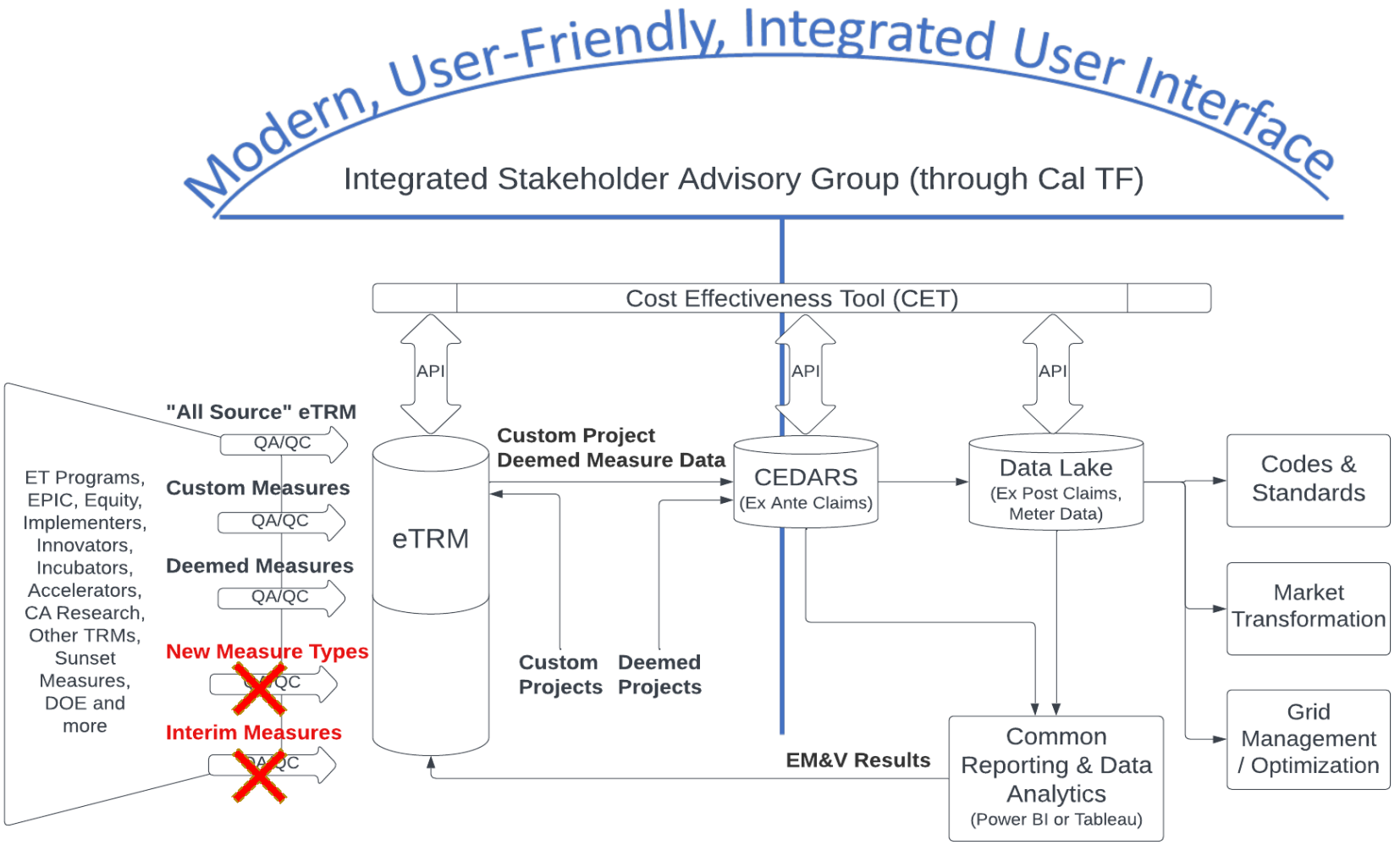
- Measure Development/Intake
  - Streamline new measure creation
  - Allow new measure types, including equity
- Data Flow
  - Custom – multiple opportunities
  - Deemed –Seamless data transfer
  - Claims - make reported data accessible
  - EM&V - Feed data back to measure development
  - Simplify access to cost effectiveness
- Data Visibility
  - Join multiple data sets
  - Missing data

CALIFORNIA TECHNICAL FORUM

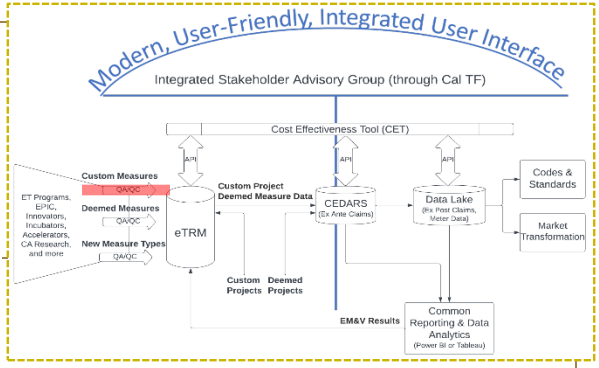
Streamline New Measure Creation



Add New Measure Types, Including Equity



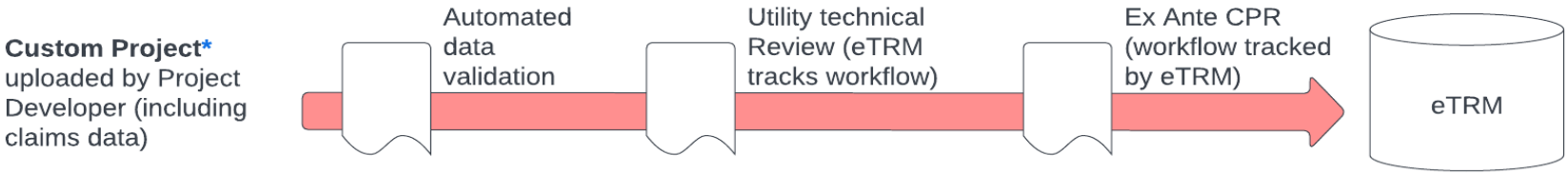
Custom – Multiple Opportunities



Modern, User-Friendly, Integrated User Interface

Web interface includes:
- All custom requirements
- Statewide tools
- Guidance documents
- Training videos

All Custom Projects housed in eTRM, facilitating Ex Ante and Ex Post analysis, reporting and data analysis across projects



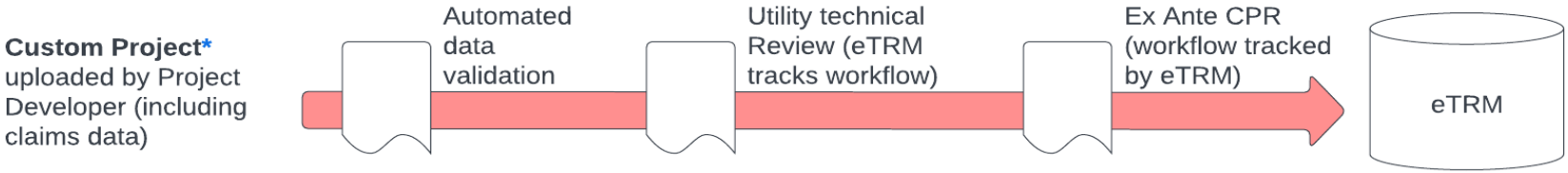
- Statewide standardization project nomenclature
- Statewide standardized project template, by Project Type
- Statewide standardized project data collection requirements, by Project Type
- Standardized baseline "look-up" rather than after-the-fact baseline determination

Custom – Multiple Opportunities

Modern, User-Friendly, Integrated User Interface

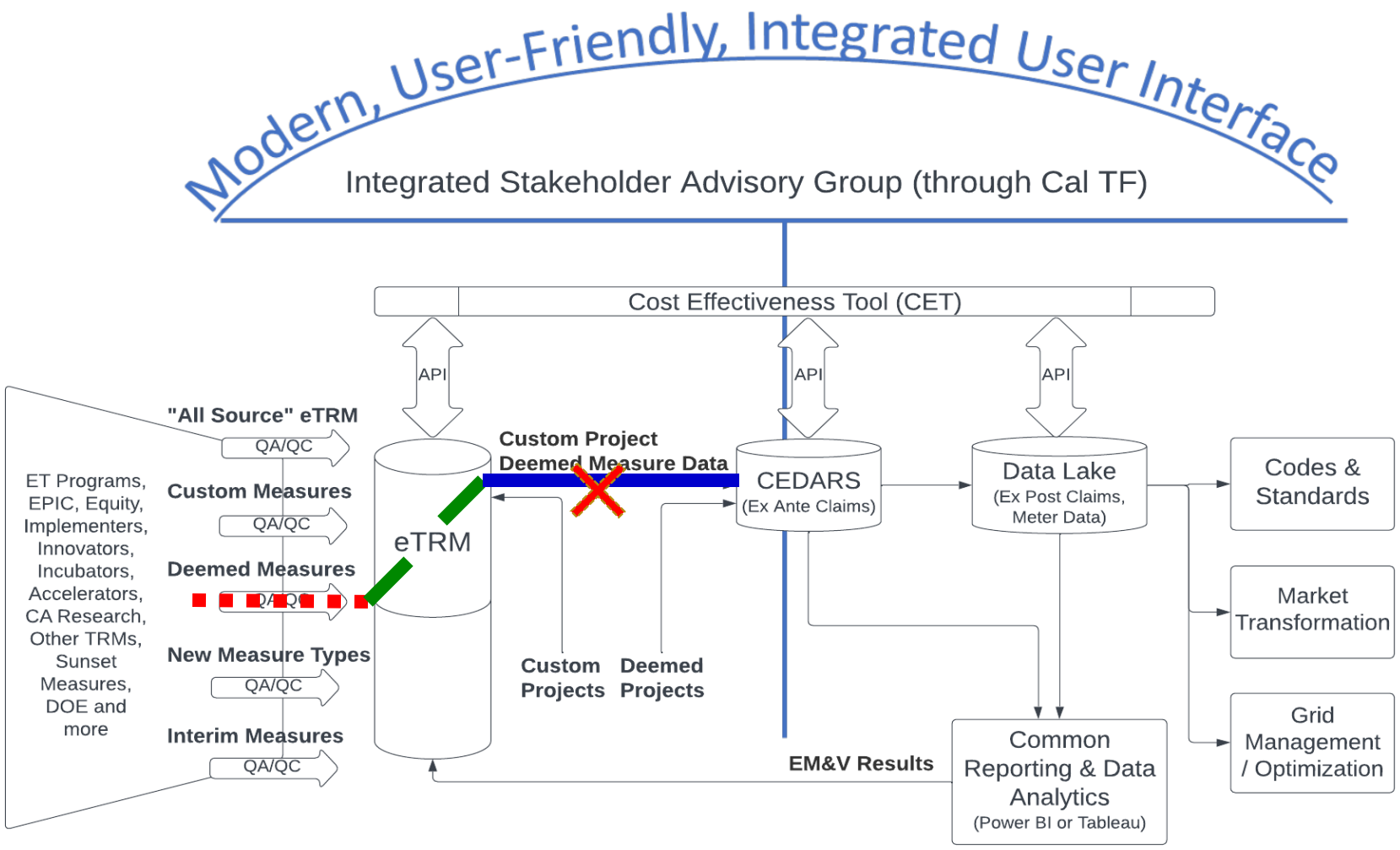
Web interface includes:
- All custom requirements
- Statewide tools
- Guidance documents
- Training videos

All Custom Projects housed in eTRM, facilitating Ex Ante and Ex Post analysis, reporting and data analysis across projects

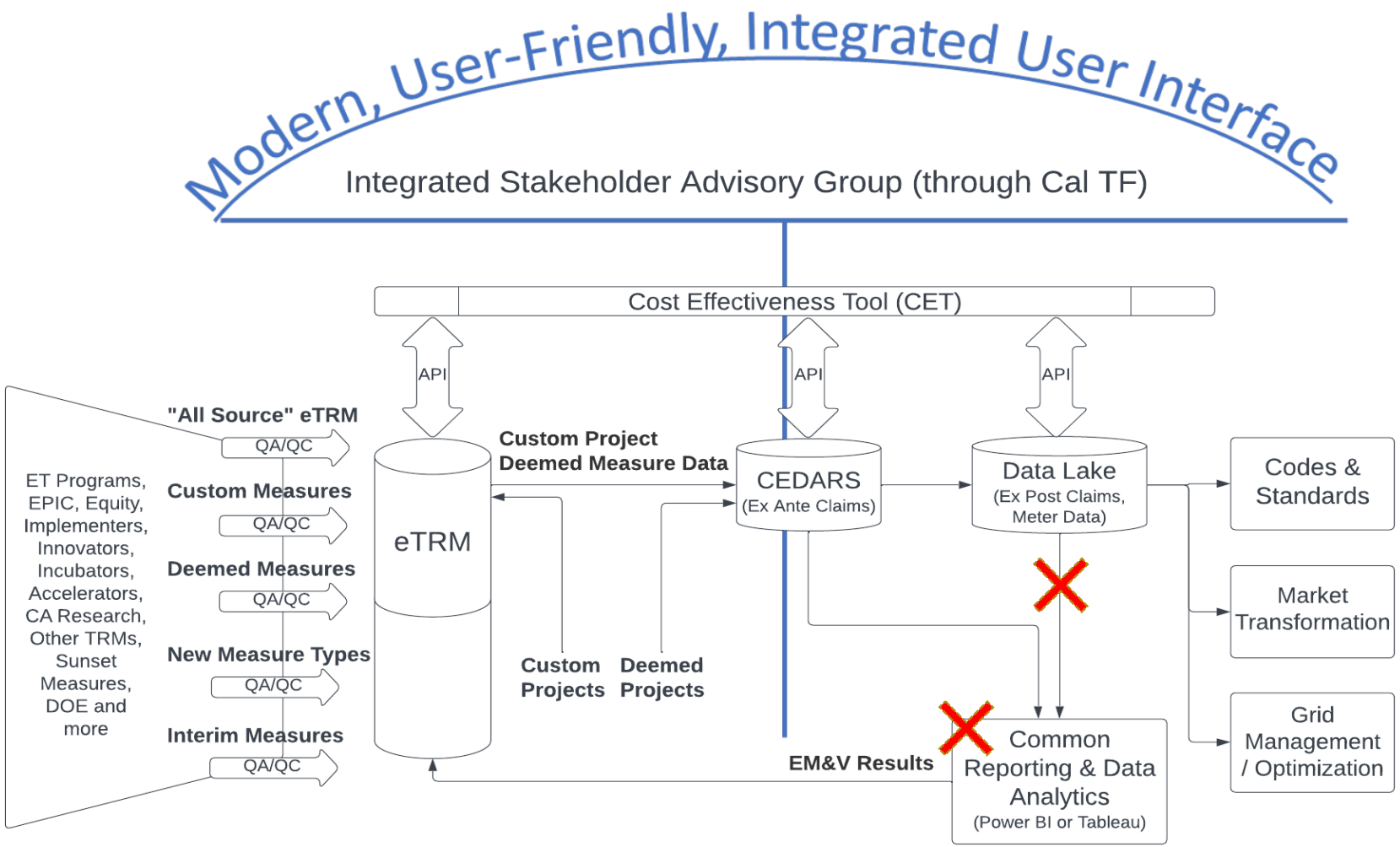


- "Custom Tools Library" for common custom measures/projects
- Transparent tracking through project development and review – Where, How Long?
- Attributions – Why are ex post values so low? Use data to understand
- Custom Reference Library – All Requirements, One Place, Easy-to-Use
- REDUCE COSTS of data administration – so much time spent sharing files, finding data

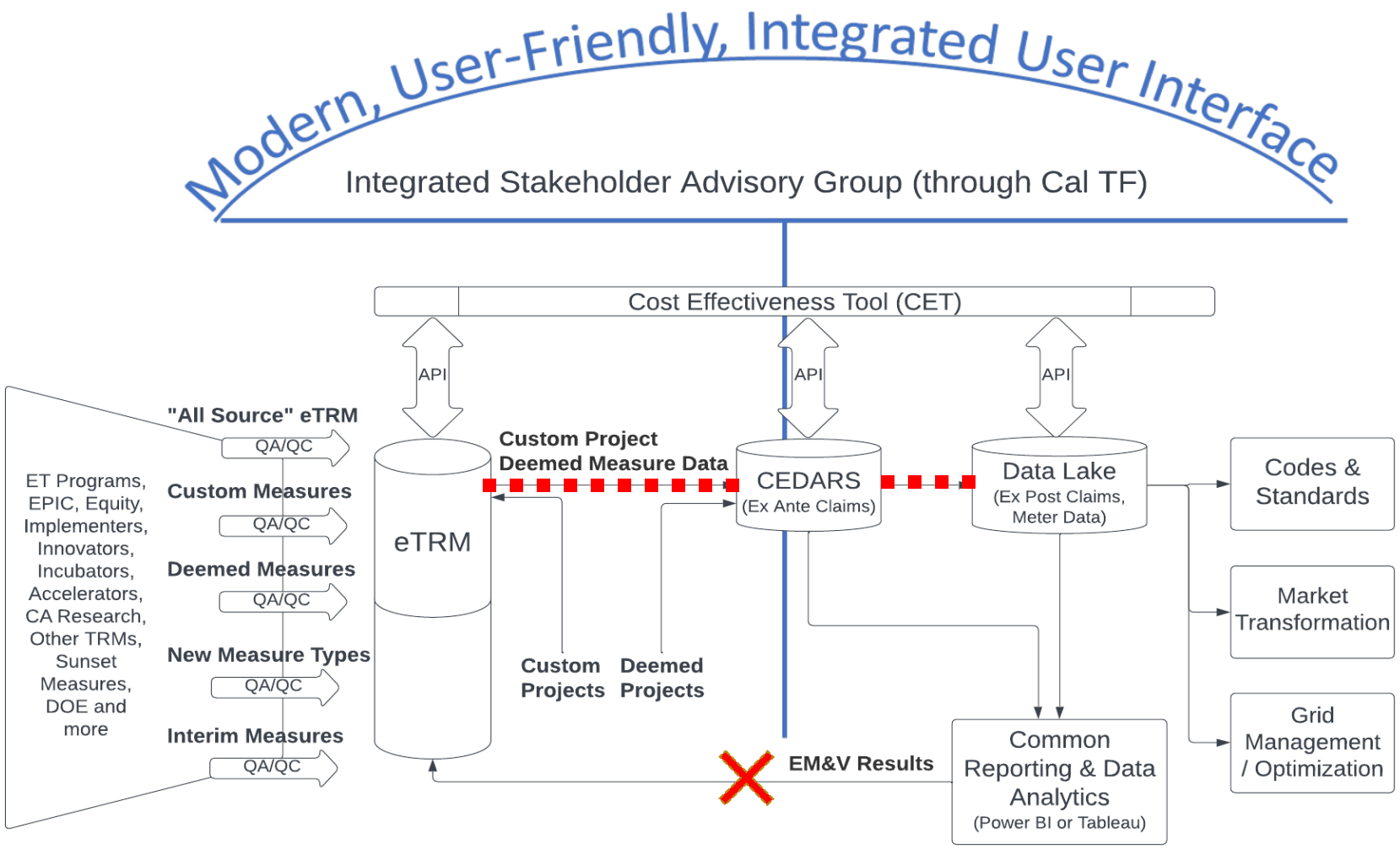
Deemed – Seamless Data Flow



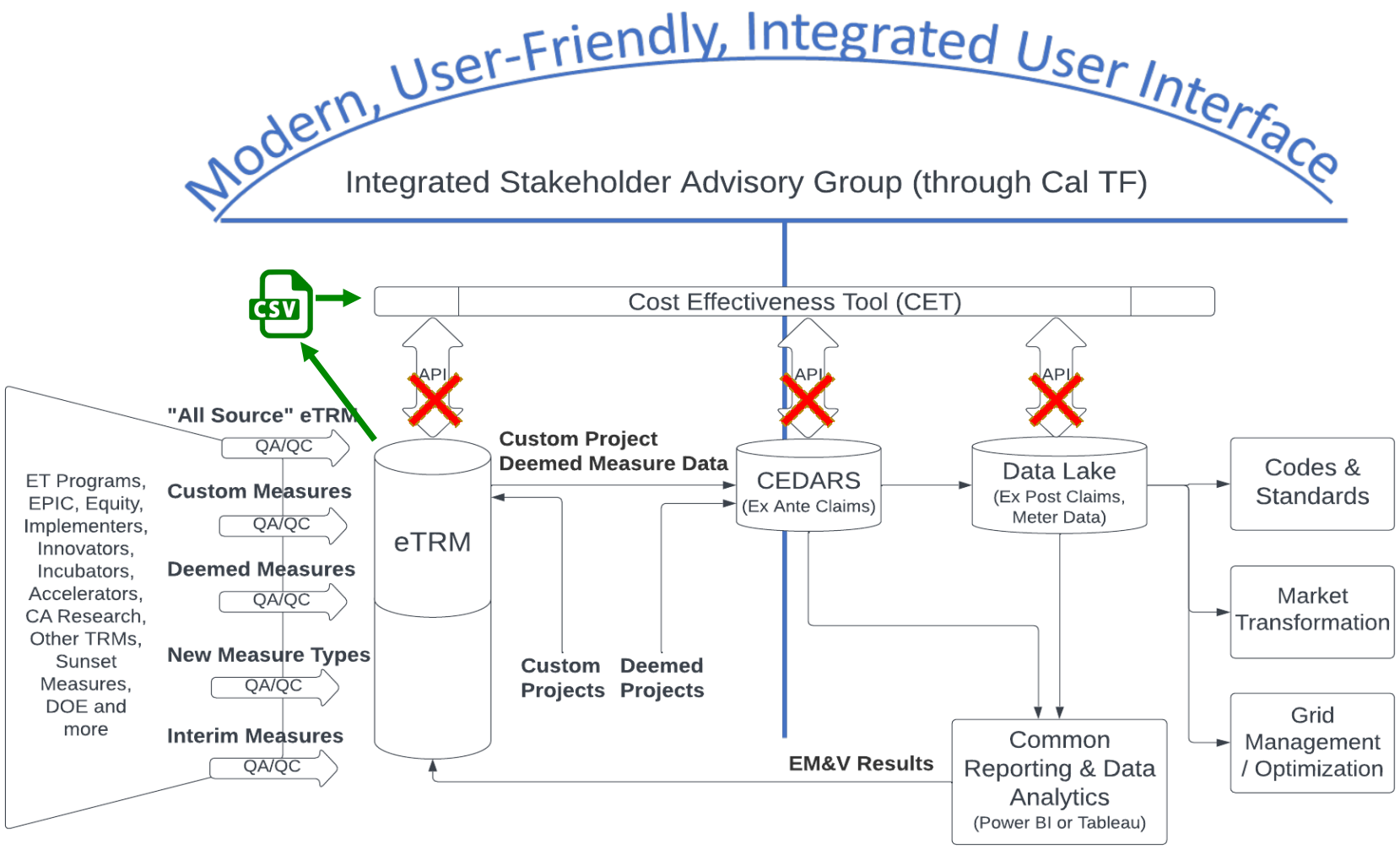
Claims - Make Reported Data Accessible



EM&V - Feed Data Back to Measure



Simplify Access to Cost Effectiveness



DAC Measure Permutations

- Create measures for DAC/EJ/low income applications (new measure permutation type)
- Use existing "market rate" measures, modify relevant parameters to create "DAC" permutations
- Use "DAC" measures whenever measure is implemented in DAC/EJ/low income community (regardless of whether program is considered "low income")
- Funding should be able to come from EE, with consideration of low income program funding as well

Data Analytics

- **Enable Data Analytics:** Allow appropriate data access (preserving PII) throughout measure journey for data analysis using commercially-available tools
  - PowerBI
  - Tableau
- **Create and Analyze More Robust Data Sets**
  - Identify federal, state and commercially available data basis that could be combined with EE/DR data to answer important questions in portfolio and program planning, design, implementation and analysis.

Data Analytics - Examples

- **Examples – Key Questions in Equity Space**
  - **Program Penetration:** Track program and measure penetration against DAC, EJ, low-income, other demographics
  - **Program Benefits (Customer)**: have low-income communities received benefit commensurate with how much they've paid in to PGC?
  - **Program Benefits (Economic/Trade Allies):** track WHO is doing work in DAC, EJ and low-income communities – is WORK going to under-employed and historically under-represented workers and trade allies
    - Maybe add vendor through "Measure Property Data"

FINAL THOUGHT

- What power would be unlocked to cost-effectively capture savings, including GHG reductions, if market actors had access to meter-level data?