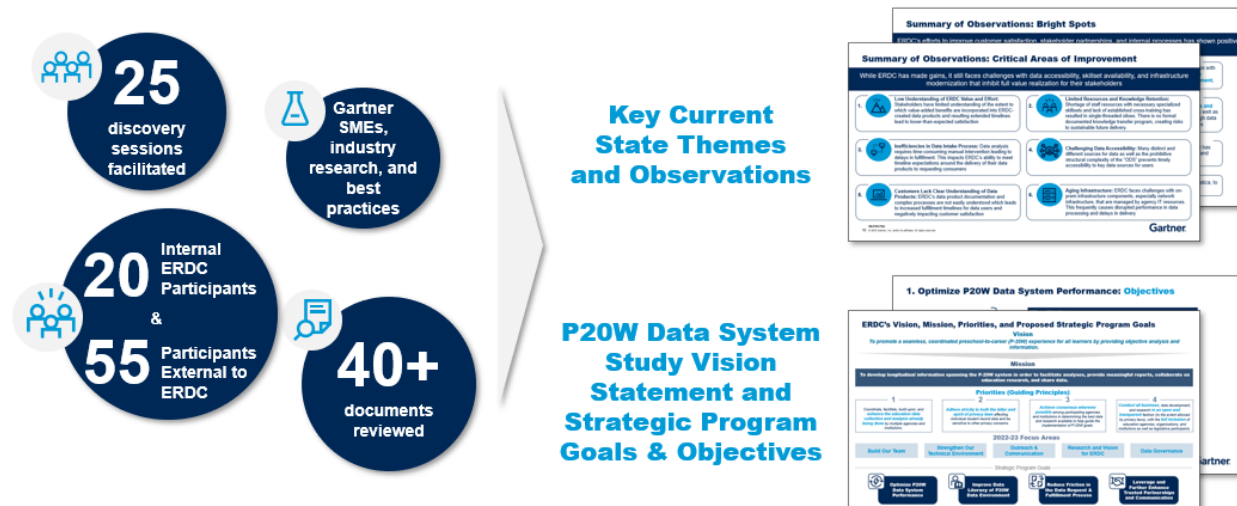# Education Research & Data Center (ERDC)'s P20W Data System Study

Observation Process

Gartner analyzed the current state of ERDC's P20W data system and related processes with inputs from stakeholder interviews and document reviews to identify key findings and strategic goals.

25 discovery sessions facilitated

Gartner SMEs, industry research, and best practices

20 Internal ERDC Participants &

55 Participants External to ERDC

40+ documents reviewed

Key Current State Themes and Observations

P20W Data System Study Vision Statement and Strategic Program Goals & Objectives

Observations: Bright Spots

ERDC's efforts to improve customer satisfaction, stakeholder partnerships, and internal processes has shown positive impact both within and external to the organization.

Customer Satisfaction
External: Customers interviewed predominantly expressed satisfaction with the **quality of data products** and their **relationship** with ERDC, especially customers who work closely with them

Efforts to Build Trust
External: ERDC continues to focus effort on building relationships with data contributors/partners and users to **improve collaboration, transparency and expectation alignment**, such as the Data Contributors Meeting

Business Process Efficiencies
Internal & External: The 2020 Business Process Improvement Initiative made gains in efficiency of ERDC's business processes and reduced barriers for ERDC staff to fulfill customer requests, through **process standardization and formalization**

Clear Roles & Responsibilities
Internal: ERDC has established **well-defined responsibilities and tasks** in the data management process for each role as well as interaction between roles to drive clarity and ensure high data quality though completion of all essential activities

Efforts to Aid Data Accessibility
Internal: Development of data marts has increased accessibility of some key data for Data Users and aided request fulfillment

Simplified MDM Practices
Internal: Consolidation of many key data sources in MDM has streamlined data validation and loading processes and enabled quality assurance

Leading Vendor Relationships
Internal: ERDC has established strong technology capabilities by employing modern, market-leading technology vendors, such as Informatica and Tableau, to conduct data management activities **now and into the future.**

Observations: Areas of Improvement

While ERDC has made gains, it still faces challenges with data accessibility, skillset availability, and infrastructure modernization that inhibit full value realization for their stakeholders.

1. **Low Understanding of ERDC Value and Effort (Internal & External):** Stakeholders have limited understanding of the extent to which value-added benefits are incorporated into ERDC-created data products and resulting extended timelines lead to lower-than-expected satisfaction

2. **Limited Resources and Knowledge Retention (Internal):** Shortage of staff resources with necessary specialized skillsets and lack of established cross-training has resulted in single-threaded silos. There is no formal documented knowledge transfer program, creating risks to sustainable future delivery.

3. **Inefficiencies in Data Intake Process (Internal & External):** Data analysis requires time-consuming manual intervention leading to delays in fulfillment. This impacts ERDC's ability to meet timeline expectations around the delivery of their data products to requesting consumers

4. **Challenging Data Accessibility (Internal):** Many distinct and different sources for data as well as the prohibitive structural complexity of the "ODS" prevents timely accessibility to key data sources for users

5. **Customers Lack Clear Understanding of Data Products (Internal & External):** ERDC's data product documentation and complex processes are not easily understood which leads to increased fulfillment timelines for data users and negatively impacting customer satisfaction

6. **Aging Infrastructure (Internal):** ERDC faces challenges with on-prem infrastructure components, especially network infrastructure, that are managed by agency IT resources. This frequently causes disrupted performance in data processing and delays in delivery

P20W Data System Study Vision Statement and Strategic Goals

ERDC's journey to continually enhance the P20W Data System will be guided by a purposeful vision around which to align goals and corresponding initiatives that contribute to its progress.

ERDC Mission

To develop longitudinal information spanning the P-20W system in order to facilitate analyses, provide meaningful reports, collaborate on education research, and share data.

P20W Data System Study Vision Statement

Ensure that the P20W Data System remains one of the most comprehensive longitudinal data systems in the state by responsibly and efficiently meeting the needs of staff and customers, now and in the future.

P20W Data System Study Strategic Goals

| Optimize P20W Data System Performance | Improve Data Literacy of P20W Data Environment | Reduce Friction in the Data Request & Fulfillment Process | Leverage and Further Enhance Trusted Partnerships and Communication |

For more information, please visit ERDC's <u>P20W Data System Study webpage</u>. Please contact <u>Megan Schoor</u> if you have questions or feedback about the P20W Data System Study vision, strategic goals, or next steps.

Gartner