

Knowledge Discovery

Accelerating the Next Generation of Care with Data Analytics



In today's complex health and safety ecosystem, there is no end to the amount of data being generated, collected, and stored. This information has the potential to influence important research and discovery, identify trends affecting health and public safety, inform policy and processes in both private and public sectors, and ultimately create a healthier, safer, and more efficient world.

OUR APPROACH

Optimize Your Data in a Single Framework

Leidos is transforming the process of translating disparate data into meaningful intelligence. Our approach is delivered via our Collaborative Advanced Analytics & Data Sharing (CAADS™) machine learning and AI framework. The end to end, scalable, big data analytics solution addresses the primary challenges of stakeholders in health and hospital systems, public health domains, biomedical research labs, and health policy, namely:

- ▶ Data is moving beyond relational databases into big data and cloud platforms along with high volumes of data, high variety, and greater consumption demands.
- ▶ Data scientists are spending most of their time finding and preparing data, delaying analysis and slowing time to actionable insights.
- ▶ Current environments create coding requirements and bottlenecks that limit self-service adoption within the organization.
- ▶ Stakeholders are unable to collaborate and share data across multiple users in various locations.
- ▶ Data Governance across multiple silos of data is minimal and a resource-intensive challenge.

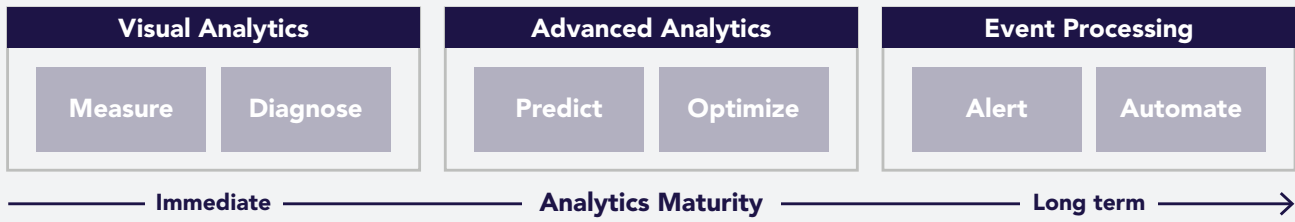
Enabling Key Value In Standard Data Analytics Pipeline

- ▶ Rapid and cost-effective solution to ingest data
- ▶ Quality check solutions for incoming data streams
- ▶ Filters out bad data before data consumption
- ▶ Cost-effective data storage handles all data types
- ▶ Flexible data model enabling economical and rapid change
- ▶ Designed to scale
- ▶ Rapid and efficient data prep for ad-hoc analytics
- ▶ Collaborative and transparent analytics approach
- ▶ Supports analytics tool of choice

The CAADS single pane of glass (SPOG) gives users access to all the capabilities analysts need to access, transform, analyze and share data via a common and secure user interface. Through user-based profiles, CAADS delivers actionable intelligence to multiple roles within an organization.

- ▶ Provides native support for big data analytics on all "big data" platforms and does not require moving data to access 100% of the structured, semi-structured, and unstructured data
- ▶ Reduces the complexity of preparing the data for business users and data scientists, accelerating time-to-insight for greater opportunities to identify patterns and drive business
- ▶ An interoperable web-based solution built on open standards and open platforms, extensible at all layers, based on evaluated best-of-breed stack
- ▶ Collaboration and governance built into the platform from the beginning

CAADS™ AI & MACHINE LEARNING ENABLEMENT FRAMEWORK



FRAMEWORK CAPABILITIES AND BENEFITS

Capability	Benefits
Data Storage and Processing	<ul style="list-style-type: none"> – Agile, open architecture solution for storing and processing massive volume, velocity, and variety of data. – Enables data integration, streaming ingest, and storing and processing unstructured data.
Data Governance	<ul style="list-style-type: none"> – Smart data catalog that automatically discovers, organizes and surfaces high-quality information, making it easy to find and use data.
Predictive Transformation	<ul style="list-style-type: none"> – Self service data preparation using suggestive approach in rapidly developing data processing jobs.
BI and Data Visualization	<ul style="list-style-type: none"> – Self service approach towards rapidly building and sharing interactive data visualization. – Link analytics tools enable greater insight into data relationships to isolate suspicious entities. – Geospatial Analytics to perform iterative, spatial analysis to solve complex problems related to the physical world.
Advanced Analytics (machine learning)	<ul style="list-style-type: none"> – Provides a collaborative, visual environment to create and deploy analytics workflow and predictive models.
Text Analytics Capability	<ul style="list-style-type: none"> – Extract meaningful information from unstructured text data using machine learning and NLP.
Data De-identification Service	<ul style="list-style-type: none"> – Data Masking, Encryption — Reversible redaction of individual fields of data, and detection/locate sensitive data.

PROVEN SUCCESS

By integrating data from multiple sources, spinning up analytics projects rapidly, and simplifying the process of developing predictive models, CAADS delivers actionable insights to improve health and safety outcomes. Leidos has worked with several customers on customized solutions, including:

- ▶ Center for Disease Control & Prevention (CDC)
- ▶ NASA
- ▶ U.S. Mint
- ▶ Centers for Medicare and Medicaid Services (CMS)
- ▶ Federal Trade Commission (FTC)
- ▶ Texas Health Resources (THR)

INDUSTRY RECOGNITION

- ▶ CDC Shepard Award 2017 & 2018
- ▶ 2017 NASA Bravo Award
- ▶ 2016 Finalist Innovation Award
- ▶ 2016 Technology Trailblazer

WHY PARTNER WITH LEIDOS?

Recognized as a Top 10 Health IT provider and bringing deep healthcare expertise across federal and commercial domains, Leidos draws on four decades of success to deliver a broad range of customizable, scalable solutions to hospitals and health systems, biomedical organizations, and every U.S. federal agency focused on health. Our team of experts will work with you to develop solutions that can help your organization improve clinical, operational, and financial outcomes. To learn more about CAADS or to request a demo, talk to a Leidos expert today.

FOR MORE INFORMATION
leidos.com/health

