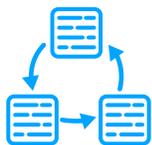# Analytics for defense operational readiness

Achieve the highest levels of operational readiness with AI enabled, data driven insights

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Make better and faster operational decisions with integrated and consistent data

Reduce the time from assess to execute using analytics powered by artificial intelligence

Align human and equipment resources with mission requirements

The Issue

Data availability is so pervasive today that defense ministries and departments are struggling to manage and use it effectively. Explosive growth in data volume, variety and velocity – combined with fragmentation across different systems – makes it difficult for people to see connections across data, generate insights, and use it to make the best decisions affecting operational readiness with speed and confidence.

Doing so is more important than ever. After many years of conflict, countries are shifting their strategic focus from counterterrorism, counterinsurgency and nation building to conventional combat focused on near-peer competitors. This trend, coupled with downward pressure on defense budgets, is compelling defense ministries and departments to make the highest-quality decisions related to personnel, training, assets and materials – all of which have the greatest impact on operational readiness.

What's needed is a better way to manage and optimize personnel, logistics and financial decisions to achieve the highest levels of operational readiness. This requires timely, accurate, data driven insights surfaced by proven, successfully deployed commercial analytics solutions powered by artificial intelligence (AI).

The Challenge

Optimizing talent acquisition, training, management and retention. Defense departments seeking to hire new personnel face a highly competitive environment. SAS[w] improves recruitment, training and retention by targeting the right programs to the right personnel.

Ensuring materiel and equipment availability. To optimize missions, defense ministries and departments need to analyze logistics and supply chain data to understand what's available and predict what's needed. SAS helps by enabling a comprehensive understanding across procurement, inventory and maintenance, and increasing the accuracy in forecasting and planning for future missions.

Making the most of limited budgets. Gaining insights into diverse data sets adds fidelity to cost, schedule and performance metrics, which drives more agile financial management and reduces the risk of fraud. SAS identifies opportunities to optimize spending and surfaces anomalies early so more budget goes to what's needed.
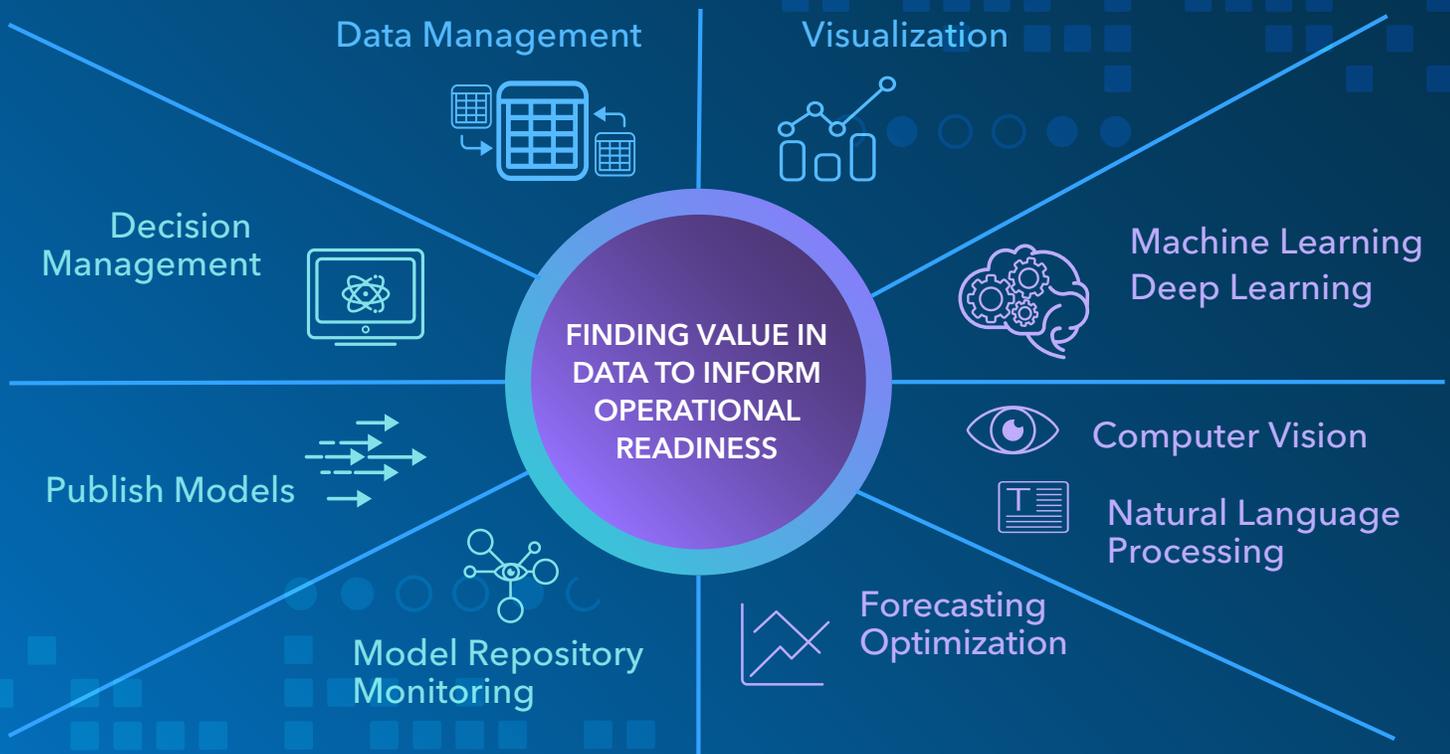
Our Approach

In the face of operational readiness challenges and budget constraints, SAS empowers decision makers to align resources to mission requirements in operationally and fiscally impactful ways. We approach these challenges by providing analytics software and services supporting:

- **Workforce analytics.** SAS delivers data analytics for informed talent acquisition and development decisioning across the DoD career life cycle.
- **Smart supply chains.** By integrating planning data and real-time location data, SAS drives smarter, more agile supply chains that can respond to new demands with ease.
- **Strategic logistics decisioning.** SAS supports enterprise-level planning with AI-enabled, big data solutions that reveal hidden connections across disparate data sets.
- **Predictive maintenance.** SAS provides streaming analytics for real-time visibility into equipment readiness.
- **Analytics for program management.** SAS empowers decision makers to maximize the value of budgets by driving efficiency into programmatics and procurements.
- **Fraud detection and security.** SAS analytics finds hidden anomalies in procurement and purchasing processes to identify fraud and save budget.
- **Mobile access in the field.** SAS gives users secure, mobile access to information.

The SAS® Difference

SAS solutions supporting operational readiness, which run on a scalable analytics platform powered with AI and machine learning, have a proven track record in industries and governments around the globe. Once deployed, they have a rapid and favorable impact on even the toughest readiness challenges – from the user to the enterprise level – with capabilities such as:

- **Rapid data ingestion and end-to-end integration.** Access, process and analyze large volumes of complex data in many different formats, as well as reconcile and map data from diverse data providers. Integrate and secure information across siloed systems.
- **Integrated, intuitive analytics.** Gain valuable insights and make better decisions using an intuitive user interface that provides access to network analysis, timelines, computer vision and text analytics designed for ease of use.
- **Intelligent case management.** Use intuitive workflows to drive efficiencies, improve reporting consistency and facilitate collaboration.
- **Product configurability.** Easily adapt the SAS solution to accommodate missions and scenarios, as well as requirements for your evolving organization.

Data Management

Visualization

Decision Management

Machine Learning Deep Learning

Publish Models

Computer Vision

Natural Language Processing

Model Repository Monitoring

Forecasting Optimization

FINDING VALUE IN DATA TO INFORM OPERATIONAL READINESS

Learn more about how SAS® is used in defense and national security.

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