

How Teradata Empowers the U.S. Military and Intelligence Community

Nations that can most effectively harness intelligence through their military and intelligence infrastructures will hold a decisive advantage in future conflicts.

Human decision-making is inherently limited by three factors: the quality of available information, the volume of data that can be understood, and the speed at which it can be processed. Each decision requires time to identify the decision point, gather and interpret both historical and real-time data, consider multiple perspectives, evaluate potential impacts, and eliminate less viable options. This process is often described in military terms as the OODA Loop—Observe, Orient, Decide, Act. “Observe” focuses on collecting and generating insights, while “Orient” involves processing and contextualizing those insights.

How AI augments the decision chain

While the human brain excels at recognizing patterns, it struggles to analyze millions of data points efficiently. This is where AI becomes a force multiplier—augmenting human decision-making by rapidly processing vast datasets, performing complex analyses, and prioritizing information for faster, more informed decisions.

In an AI-driven decision chain, data is first cleansed and integrated. From this foundation, signals are generated (Observe) and then distributed as actionable intelligence (Orient) to support decision-making (Decide and Act).

Decision Chain

Automated applications within this chain can query, analyze, and derive signals from data products. These apps may:

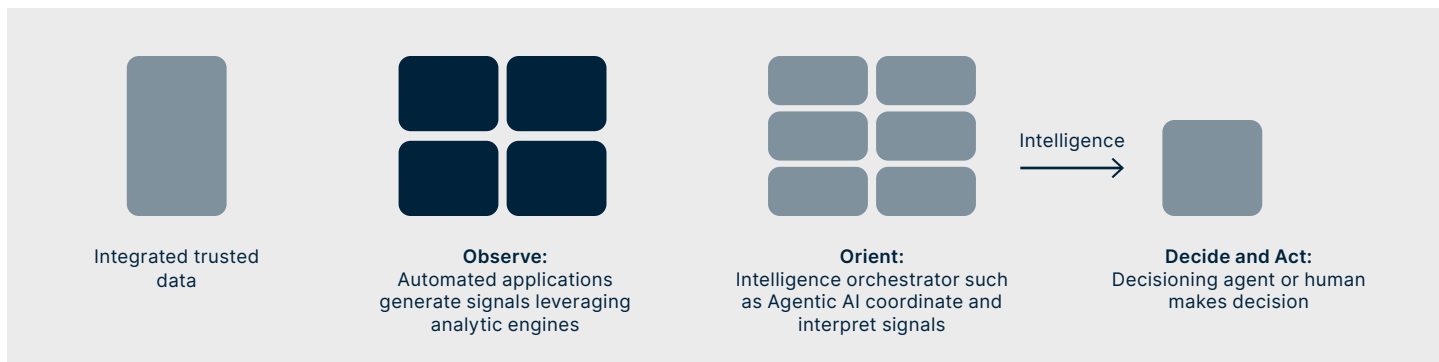
- Leverage rule-based logic or agentic AI processes
- Apply advanced analytics, generative AI, machine learning, or deep learning
- Operate on data platforms or function as autonomous AI agents

The orchestrator—whether human, rule-based, or AI-driven—must evaluate each signal or combination of signals and their associated metadata and context to determine relevance and validity for decisions. This evaluation results in intelligence. The orchestrator may:

- Request additional information
- Query data using SQL or natural language interfaces
- Determine appropriate routing of intelligence—identifying who or what should consume it

The decision-maker—whether human, rule-based, or AI—consumes intelligence from multiple sources, evaluates conflicting intelligence, and ultimately decides.

By integrating AI across automated apps, orchestrators, and decision-makers, the military and intelligence community can dramatically enhance the speed and accuracy of decision-making. AI becomes embedded in the very fabric of the decision chain, powering the future of warfare with precision, scale, and agility.



Teradata Vantage®: High-performing data and analytics platform

To fully realize the potential of AI in the decision process chain, three foundational capabilities are essential: trusted data, high-volume access, and the ability to run complex analytics at scale. Many analytic platforms fall short under the demands of AI workloads, but **Teradata Vantage®**, powered by **ClearScape Analytics®**, is purpose-built to meet these challenges.

Teradata Vantage® can analyze massive volumes of multimodal data, whether stored within Teradata or across external data sources. Large datasets can fuel numerous complex, continuously running algorithms that generate high-quality signals essential for decision-making.

Teradata Vantage® delivers the processing power and speed required to transform data into actionable intelligence—creating a true decision advantage. Beyond raw data, Teradata Vantage® captures and contextualizes signal metadata and knowledge, enabling intelligence coordinators to assess the confidence and relevance of insights.

Teradata Vantage® powers mission-critical platforms at scale

- **Parallel processing:** Supports massive parallel processing, where multiple nodes work simultaneously on different parts of a query, significantly speeding up data processing for large datasets and complex queries.
- **Complex analytic workloads:** Handles complex analytic, ML, and AI workloads while joining hundreds of tables simultaneously with high performance.
- **Workload Management:** Prioritizes workloads to ensure CPU and IO are fully leveraged before scaling, ensuring cost efficiency.
- **Fault tolerance:** Component redundancy across the entire platform ensures high availability for mission-critical AI applications.
- **Scalability:** Shared-nothing architecture allows horizontal scaling by adding capacity without compromising performance.

ClearScape Analytics®

- **Language of choice:** Use Python, R, or SQL
- **ModelOps:** Reduces deployment time from months to days with explainability and traceability
- **Enterprise Vector Store:** Powers AI-driven insights, enabling seamless unstructured data integration
- **Bring Your Own Analytics:** Operationalizes models developed in other tools

With robust analytic AI capabilities that enable intelligence apps at scale, Teradata Vantage® powers military and intelligence community AI decisions at the speed and accuracy required for modern warfare, providing nations with a strategic advantage over adversaries.

About Teradata

At Teradata, we believe that people thrive when empowered with trusted information. We offer the most complete cloud analytics and data platform for AI. By delivering harmonized data and Trusted AI, we enable more confident decision-making, unlock faster innovation, and drive the impactful business results organizations need most.

See how at [Teradata.com](https://www.teradata.com).