

# Supply Chain Intelligence

## Using Analytics to Drive Efficiency and Growth

Action provides organizations with an easier path to capturing, managing, and analyzing supply chain data. As a result, businesses can react faster to changing conditions to gain a competitive advantage in the Digital+ economy.

Global supply chains are facing immense pressure and highly competitive market conditions. To succeed and minimize impacts from volatility, companies must leverage data to anticipate disruptions and respond quickly to customer and supplier shifts. Yet, many organizations are still struggling to gain visibility into their supply chain and access the data needed for real-time actions.

Gartner defines a supply chain control tower as a concept that results in combining people, processes, data, and technology. Control towers capture and use (close to) real-time operational data from across the business ecosystem to provide enhanced visibility and improve decision-making.

## The Supply Chain Control Tower

The supply chain control tower is a concept that is becoming increasingly important in today's globalized business environment. With the rise of e-commerce and globalization, supply chains have become more complex and interconnected. As a result, companies need to be able to manage their supply chains more effectively to remain competitive. The control tower consolidates data from various sources, such as enterprise resource planning (ERP), transportation, and data warehouse management systems, to provide a comprehensive overview of the supply chain. This enables companies to make informed decisions, optimize their operations, reduce costs, and remain competitive.



The Actian Data Platform can help organizations create a supply chain control tower by connecting, managing, and analyzing supply chain data, including sales, inventory, and logistics data, into a single pane of glass that is visible across the organization. This comprehensive view of the supply chain enables real-time visibility and insights, and it allows companies to be more agile in their operations.

The Actian platform can integrate any data source into a high-performing online analytical processing (OLAP) data warehouse that enables swift identification of supply chain bottlenecks and operational inefficiencies (Figure 1). It also provides customer analytics to uncover opportunities for cost control and revenue growth. The Actian Data Platform can be utilized by companies for their supply chain control tower to make use of data in a way that enables them to anticipate and prepare for any potential disruptions in the future, instead of just reacting to them. This data-driven decision-making enables companies to take proactive measures to mitigate risks and improve supply chain resilience.

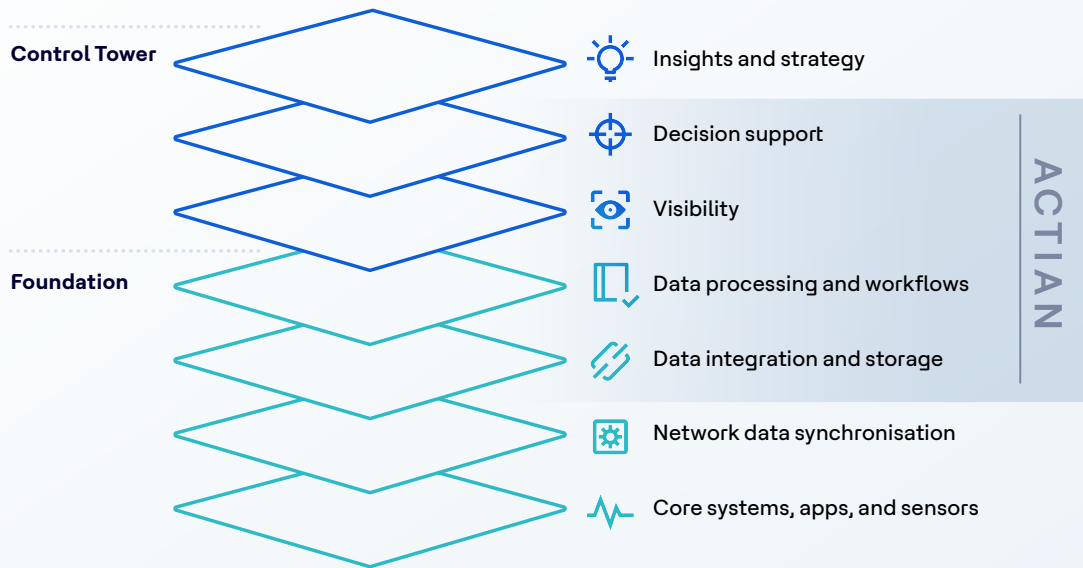


Figure 1: Actian-Enabled Supply Chain Control Tower

## Data-driven Supply Chain Use Cases

Business leaders recognize that a well-optimized supply chain provides a competitive edge. Ensuring timely delivery, reducing waste, and enabling agile decision-making requires an investment in data analytics, and strategic partnerships to gain better visibility, enhance collaboration, and drive continuous improvement across the supply chain (Figure 2).

**Demand Forecasting:** Utilize historical sales data, market trends, seasonality, and other variables to anticipate future demand for goods, improve inventory management, minimize waste, and enhance customer satisfaction.

**Supplier Management:** Evaluate supplier performance data to identify any areas for improvement and collaborate with suppliers to reduce costs, enhance product quality, and ensure timely delivery of goods.

**Inventory Optimization:** Manage inventory levels by utilizing supply chain data. By analyzing various factors such as sales trends and lead times, organizations can determine the ideal inventory levels and reduce inventory carrying costs, while ensuring they maintain adequate stock to meet customer demands.

**Risk Management:** Examine supplier performance, market trends, geopolitical conditions, weather data, and other relevant factors to detect potential disruptions before they impact business goals.

**Logistics Optimization:** Use supply chain data to improve transportation, warehousing, and distribution operations by analyzing transportation routes, delivery times, and other factors to identify opportunities for cost reduction and enhanced efficiency.

**Sustainability:** Monitor carbon emissions, and energy consumption, to uncover opportunities to reuse, recycle, and repurpose materials and resources to improve sustainability performance.

The Actian Data Platform provides the data and analytics foundation to create data-driven solutions for optimizing the supply chain. It guarantees the availability of reliable data, simplifies data integration and sharing, and establishes a strong base for drawing useful insights that lead to business expansion and operational efficiency.

 <b>VALUE TO THE BUSINESS</b>	 <b>Increase revenue</b>	Real-time supply chain analytics for decision support Customer Experience (CX)	Demand planning/forecasting Increase Customer Lifetime Value (CLV) Customer loyalty programs Personalized customer engagements
	 <b>Lower costs and maintain margins</b>	Improve operational efficiency Asset optimization Optimize Procurement Spend	Supplier analytics Preventive maintenance Logistics optimization Freight and shipping optimization
	 <b>Reduce exposure to market fluctuations and maintain compliance</b>	Real-time visibility into geopolitical trends and risks Sustainability and ESG Compliance	Data Security Fraud and financial analytics Track and trace Global trade/material shortages Sustainability and circular economy

Figure 2: Data-driven use cases to support business value

## A Data Platform that Empowers Everyone

Action enables customers to make confident, data-driven decisions that accelerate organizational growth. With more than 50 years of data experience, we provide the most trusted, flexible, and easy-to-use data platform on the market (Figure 3).

### Key benefits of the Actian Data Platform:

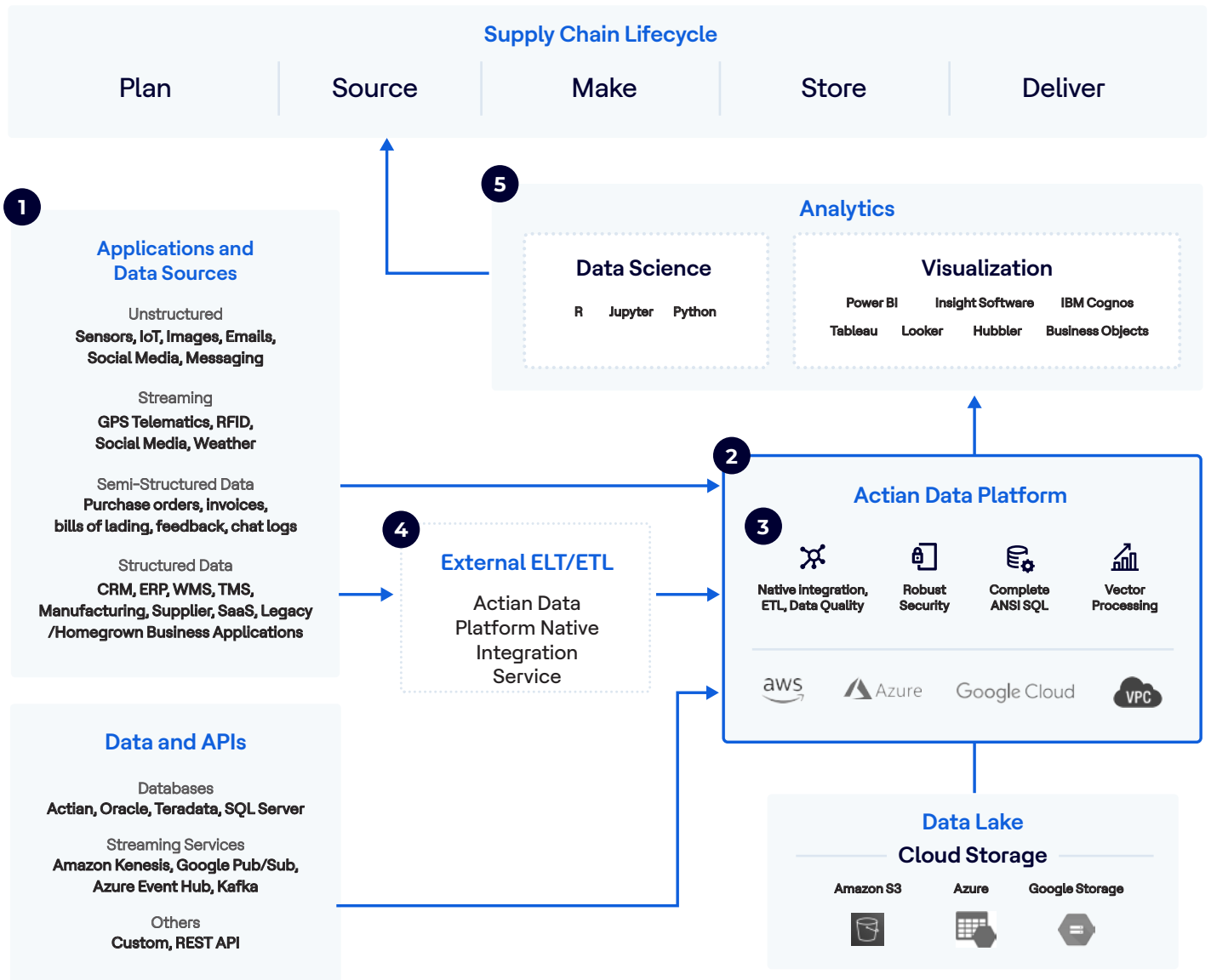
- Single, unified platform for OLTP and OLAP data analytics
- Superior price performance using on-chip memory for real-time query response.
- Built-in data integration and data quality capabilities ensure that data is complete, consistent, accurate, and up to date.
- Self-service analytics with robust access controls reduces dependence on IT and data teams delivering fast time-to-value.
- Flexible deployment options that support all major hyperscalers, cross-cloud, and hybrid environments.
- Start small and grow as business needs change with pay-as-you-go pricing and industry acceleration packages.

### Technical benefits:

- Fully Managed: No indexing, cubes, or materialized views.
- Automated Optimization: Automatic scaling based on the workload. Automated data partitioning and column compression optimized for query performance and storage requirements.

- Scalability: Petabyte scale, real-time updates without performance impact.
- High Concurrency: Support for up to 64 concurrent users out-of-the-box.
- Advanced, Vectorized Processing: Implements compression by data type, leading to 4-6x improved compression and reduced data footprint.
- Data Model Support: X12 XSD, X12 EDI, EDIFACT, TRADACOMS, BAPI, IDOC, RAIL as well as imported and customized standards.
- Data Profiling: Ensure consistent and reliable data using statistics and views, including holistic and segmented views of data inconsistencies and outliers.
- Data Quality: Configure and reuse data quality rules that enforce the structure and content of data.
- Data Support: Ingestion, transformation, cleansing, profiling, enrichment, normalization, and serialization of structured, semi-structured, and unstructured data types such as JSON/XML, delimited files, RDBMS, JDBC/ODBC, HBase, binary, ORC, ARFF, Parquet, and Avro.
- Enterprise Class Security: Authentication, user and role-based security, data protection, auditing, security alarms, data masking, column level encryption using Actian or customer-managed keys, and AES-256 end-to-end encryption for data at rest and in motion.

# Supply Chain Optimization Analytics



## Using Data to Support Multiple Personas and Drive Business Success

The Actian Data Platform supports various roles within an organization. Because each role contributes differently to utilizing data for business understanding, our platform aims to make it easy for all data consumers to access the data they need quickly and securely. Promoting teamwork, productivity, and transparency, the Actian platform can cater to the unique requirements of data engineers, data analysts, data scientists, business users, and IT administrators.

To ensure that the data is easily understood, accessible, and aligned with the unique needs of each user, the Actian platform is purpose-built to make data easy. Actian designed our platform to make it easy to empower cross-functional collaboration, integrate data, and share the insights needed to meet business goals. With persona-specific capabilities, the Actian platform empowers users to make data-driven decisions, improve operational efficiency, and gain a competitive advantage for the organization.

For that reason, the Actian platform comes with over 200 prebuilt connectors and the ability to leverage REST and SOAP API's, to ensure companies have a complete picture of all the data they need to achieve success.

## Driving Supply Chain Success with Actian Data Platform

Actian's Data Platform is an ideal solution for businesses that need to enhance their supply chain performance to succeed in today's fast-paced market. By utilizing Actian's cloud-based technology, companies can obtain scalable, agile, and readily available supply chain data in real-time. The platform's native data integration provides businesses with a comprehensive and reliable view of the entire supply chain environment. With the Actian Data Platform, businesses can fully leverage their supply chain data, gain an edge over competitors, and drive sustainable growth in today's complex and interconnected business environment.



## About Actian

Actian makes data easy. We deliver cloud and on-premises data solutions that simplify how people connect, manage, and analyze data. We transform business by enabling customers to make confident, data-driven decisions that accelerate their organization's growth. Our data platform integrates seamlessly, performs reliably, and delivers at industry-leading speeds. Learn more about Actian, a division of HCLSoftware: [www.actian.com](http://www.actian.com).