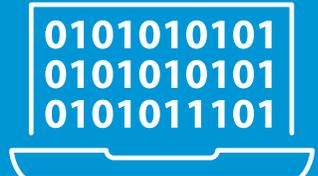




Analytic Data Flow



Problem

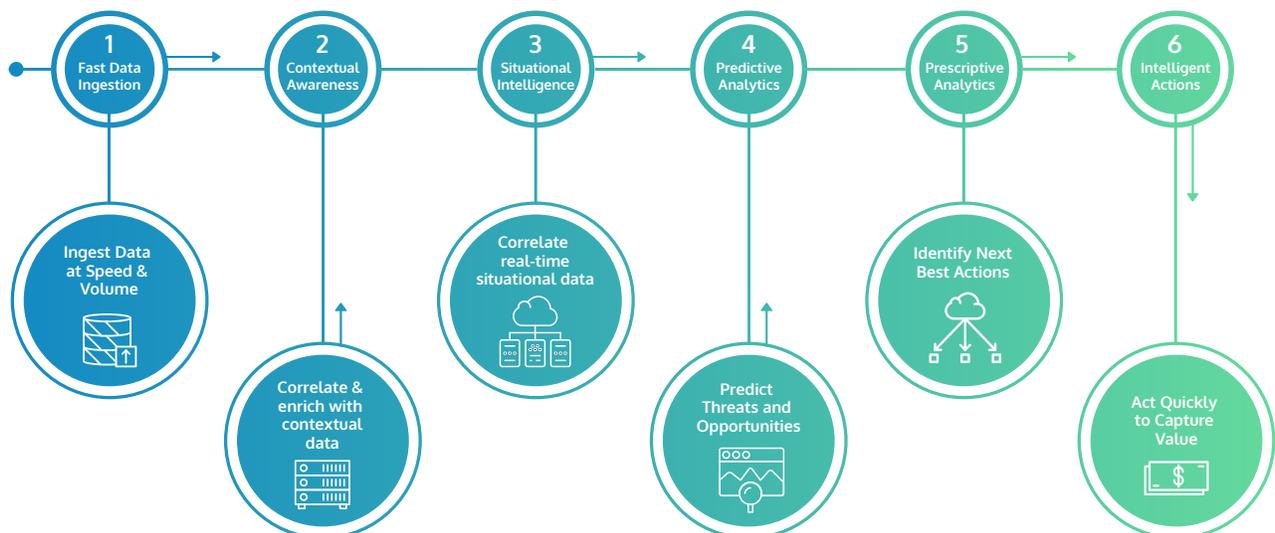
IoT analytics can play a pivotal role in transforming and improving business processes. By combining real-time, streaming and historical data with descriptive, predictive, prescriptive analytics and machine learning algorithms, critical customer and business insights can be gained to increase revenue, reduce risk, and improve operational processes. But many companies face significant challenges in implementing IoT analytics.

Without the right tools and skilled data analysts, the cost and time required to build real-time analytic solutions is often a barrier to development. Added to this are the challenges of integrating diverse data sources and the operationalization of insights due to data silos, legacy systems, and rigid processes.

Solution

Vitria's Analytic Data Flow makes it easy to create and integrate analytic logic into all aspects of your business. A development environment that allows you to leverage the full analytics value chain. Combining real-time streaming data with internal and external data sources and historical, predictive and prescriptive analytics to provide the business insight required to enhance the customer experience, accelerate business processes, reduce risk and take the next best action.

Real Time Analytic Pipeline



How Vitria Solves the Problem

Vitria offers a powerful visual modeling environment that empowers citizen developers and analysts to rapidly create analytics-based solutions using visual models requiring little or no coding. Analytic Data Flow is the visual, interactive modeling environment embedded within Vitria's VIA IoT Analytic platform. This development environment can be consistently deployed across streaming and batch applications.

Analytic Data Flow (ADF) enables solution developers to rapidly lay out "analytic pipelines" consisting of multiple data and analytic processing steps using an extensible library of reusable "drag and drop" building blocks. Beyond the pre-built building blocks, ADF has an SDK to enable the creation of custom libraries of reusable building blocks. Building blocks include:

- Data sources and target connectors supporting protocols and data formats for a wide variety of data
- Data preparation (e.g. filter, parse, transform, enrich)
- Descriptive analytics, including, correlation, statistical summaries, multi-dimensional analysis, KPI computation, pattern matching, trending
- Machine learning, supporting a wide variety of regression, classification and clustering algorithms
- Predictive and prescriptive analytics, based on machine learning models and supporting real-time streaming, online, and batch processing
- SDK for encapsulating custom-built or imported code and creating custom libraries of reusable blocks.
- Time-series analytics with deep capabilities for handling delayed and out-of-order events
- Geo-spatial analytics with built-in libraries optimized for fast geospatial analysis
- State machines for pattern matching.

VIA's ADF Modelling Environment also supports interactive testing with runtime debugging, and provides full lifecycle management of ADF models. ADF's runtime environment manages the deployment and secure running of ADF analytic pipelines. The runtime environment manages the data flows and the handling of late and out-order-events. Leveraging leading big data technologies, including Spark and Hadoop, ADF provides a robust, scale-out architecture that can handle volumes exceeding tens of billions of events per day.

Benefits of VIA's Analytic Data Flow

- Analytics solutions can be created in days not months
- Single interactive visual modeling environment for descriptive, predictive, prescriptive analytics and machine learning algorithms
- Supports and manages the full lifecycle from interactive testing, deployment, and secure running of ADF analytic pipelines
- Provides a robust, scale-out architecture, and can handle volumes exceeding tens of billions of events per day

The VIA IoT analytics platform empowers business to **ANALYZE FASTER, ACT SMARTER, and INNOVATE RAPIDLY** to transform business processes, deliver competitive advantage, and improve operational performance.



Contact us today for a demonstration.



About Vitria Technology

Vitria VIA IoT Analytics Platform empowers enterprise and industrial customers to analyze faster, act smarter, and achieve better outcomes in their IoT and business operations. The company has a history of success in streaming analytics, business process management, enterprise application integration, and operational intelligence.

Vitria is now a leading player in the rapidly growing IoT (Internet of Things) analytics market. Customers include Fortune 500 companies and enterprises across a wide range of industries, including finance, manufacturing, telecommunications, utilities, retail and more. For more information, visit www.vitria.com.