![VITRIA®]

# IoT Analytics Platform-as-a-Service (PaaS)

Vitria's IoT Analytics Platform-as-a-Service (PaaS) provides a fast path to insights and actions that empower customers to transform their business operations with Internet of Things (IoT) applications. The platform enables business analysts, operations managers, and other business-centric users to get up and running and get results in minutes, not months. It includes a unified analytics engine that was designed for the demanding business and technical requirements of the IoT era. Customers can quickly deploy applications using the self-service tools and model-driven development environment. The simple four step workflow accelerates time to value for all your IoT Analytics projects.

## Results in Minutes Not Months



Faster Analytics

Predictive Analytics

Real-Time

Streaming Analytics

Historical Analytics

60%

Visualization Services

Analytics Services

Data Services

Thing Definition Services
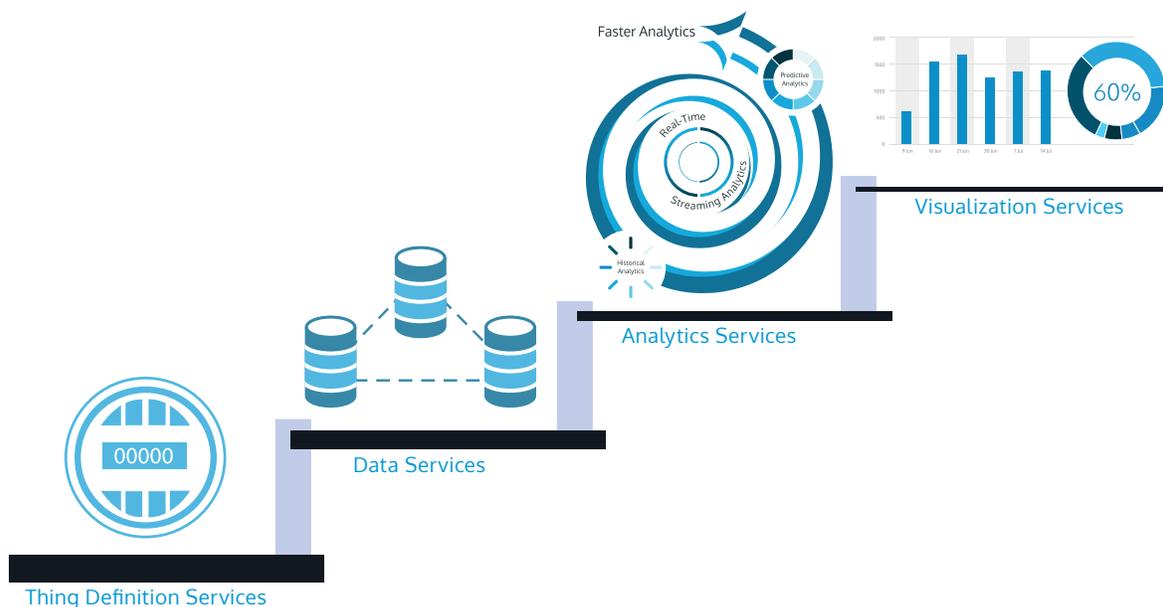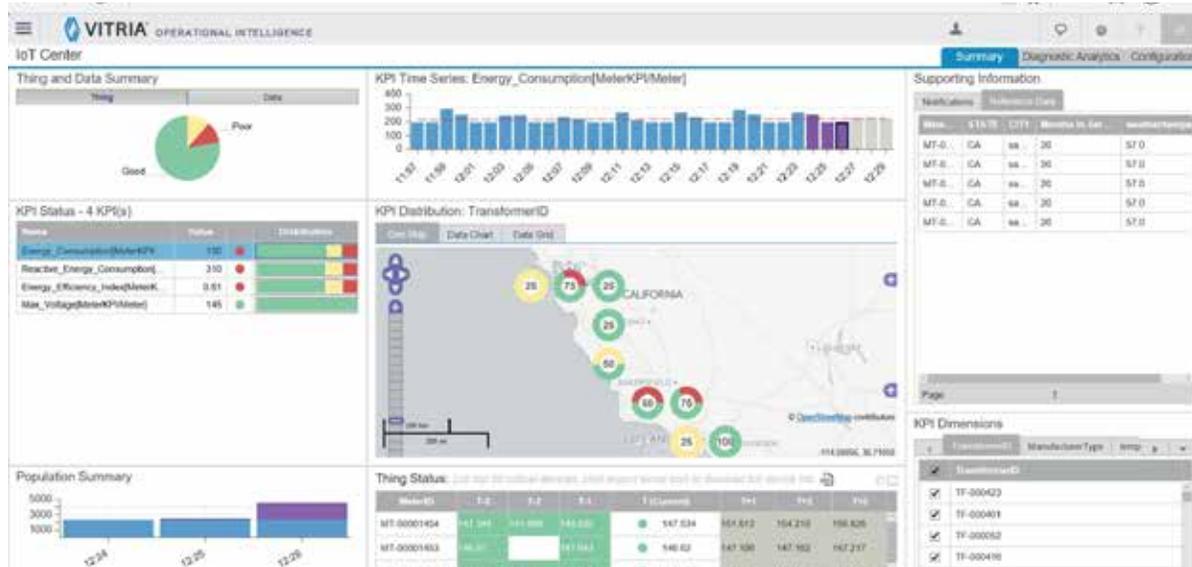
## IoT Dashboard



Vitria's Analytics PaaS for IoT provides a powerful set of visualization and dashboard style capabilities that enable operations executives and managers to make rapid business decisions that maximize business value.

## Diagnostic Analytics
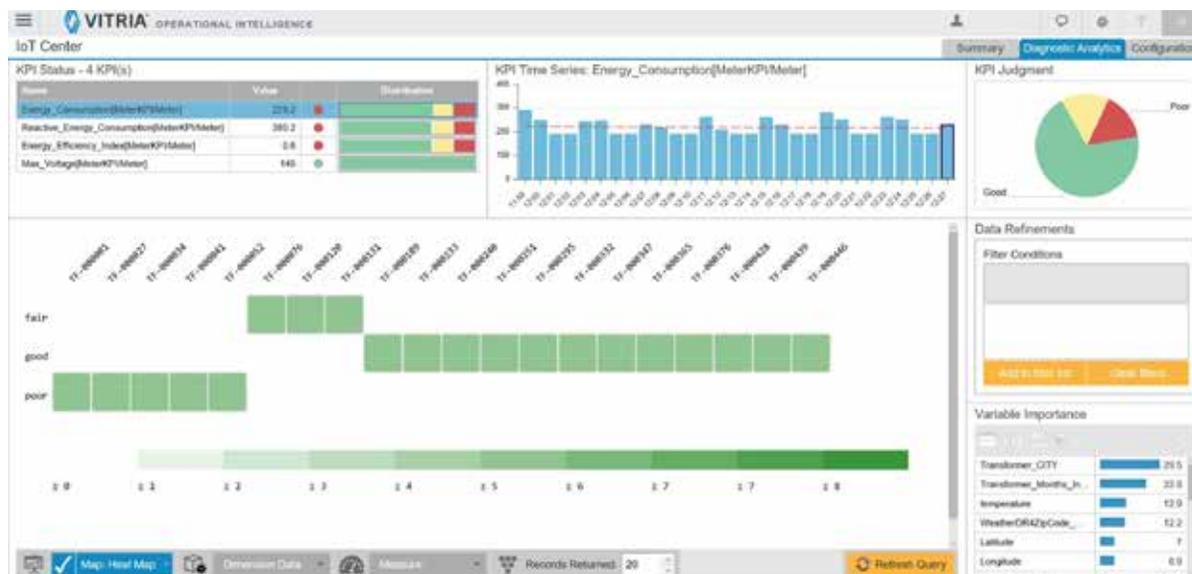


Vitria's Analytics PaaS for IoT provides a series of powerful analytics features that enable business analysts to diagnose and discover key patterns and insights in their data
and applications.

## "Thing" Definition Service

| FEATURES | DESCRIPTION |
| --- | --- |
| Scale up to 100K | "Thing" network scale up to 100K |
| Multiple Types of Things | "Thing" network with single "Type" of Things<br>"Thing" network with Multiple Types of Things |
| "Thing" Data Upload | "Thing" base data upload<br>"Thing" base data sample data as source<br>"Thing" base data format CSV, JSON, and XML |
| "Thing" Data Update | "Thing" base data update (complete refresh) |
| "Thing" Modeling | "Thing" modeling with primary key identification |

## Data Service

| FEATURES | DESCRIPTION |
| --- | --- |
| Support Data Format | Reference data and telemetric data support<br>Data format CSV, JSON, and XML for reference data |
| Streaming Ingestion | Support real time data ingestion via REST |
| Batch Ingestion | Support batch data ingestion via SFTP |
| Data Quality Report | Data freshness report on data sources ("Thing" data, reference data, & telemetric data) |
| Population Summary | "Thing" network scale report on the number of "Things" analyzed in the most recent analytics windows |
| Plugable Data Service | Optional "plugable data prep" service integration into data resources as "thing" data, reference data, and/or telemetric data |
| Weather Data Support | Weather Data (current readings) as reference data available to any user |
| Data Usage Report | Backend data resource usage status report (Under Data Resource) |

## Analytics Service

| FEATURES | DESCRIPTION |
| --- | --- |
| KI Definition | Modeling of basic KI measures and composite KIs<br>Concept of KPI set in which multiple KPIs share the same analytics intervals and dimensions |
| KI Correlation | Automatically analytics aggregation based on user defined dimensions |
| KI Computation | Computational dimension data sources from any reference data (single stream)<br>Continuous, real-time in-memory KI computation and trending regression<br>Device level, user defined population level, and system defined network level roll-ups |
| KI Judgment | User defined KI judgment policies on device level, population level, and network level |

## Analytics Service (cont'd)

| FEATURES | DESCRIPTION |
|---|---|
| KI Notification | Flexible KI judgment based notifications enabled at network, population, and device level<br>Subscription with duplicate suppression & delivery options |
| KI History | Device, population, and network level KI computation results saved in historical data lake<br>Both current and past results accessible for visualization, historical analytics, and machine learning |
| KI Prediction | Capability of importing and operationalizing user-defined predictive model with access to real-time and historical data (future releases) |
| Compound KI | Compound KI computation |
| Trend Line | Time-series EMA trend line support |
| Free Form Expression | Free form expression builder with basic options |
| KI Weather Data Support | Weather data as public reference data source for KI computational correlation |

## Visualization Service

| FEATURES | DESCRIPTION |
|---|---|
| Real-time View | Real-time view provides analytics result dashboard to monitor IoT network |
| KPI Time Series | Interactive user experience slide and dice KI to identify anomalies |
| Out of Box Visualization | With pre-defined visualization framework, users can enable preferred scorecard and dashboard with available data in the system |
| Data Quality Report | Data quality report on data freshness and "Thing" population |
| Data Usage Report | Data storage and usage report (under Data Resource) |
| Custom Dashboard | Support "Plugable visualization" for custom dashboard |
| Unified View | Analytics insight includes KIs computation results from recent past, current, and near future windows; as well as the correlation from contextual data provided by users |
| Multi-layer Analytics Insight | In real-time view, KI dashboards provide network, population, and device level computation results by clicking interested time slot, population group, and KI status |
| Diagnostic View | Diagnostics analytics user experience for strong correlation leveraging ML |

## ABOUT VITRIA

Vitria's advanced analytics solutions empower enterprises and industrial customers to achieve better outcomes faster in their business operations.

The company was founded in 1994 and has a long history of success in streaming analytics, business process management, enterprise application integration, and operational intelligence. Vitria is also 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.