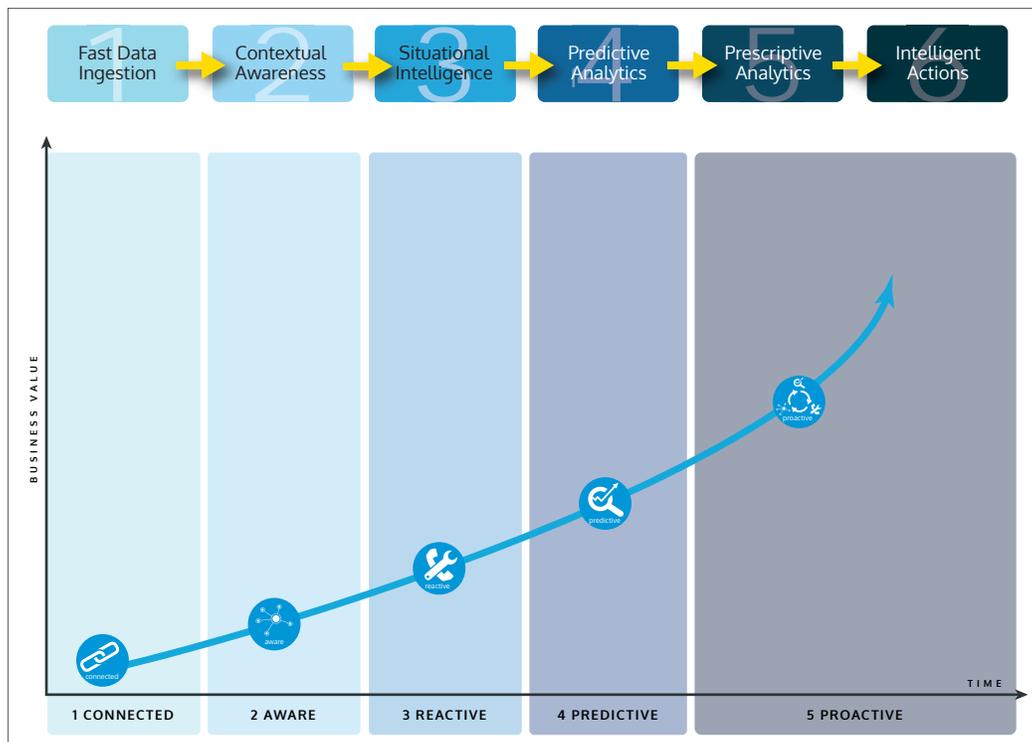


Analytics Maturity Model For IoT

As organizations seek to gain value from IoT analytics, it is useful to frame the process with a maturity model. Achieving results requires a deliberate strategy for maturing an organization's IT infrastructure and processes to ensure continuous progress. It can be conceived of as a five step process that is a close companion and complement to the analytics value chain described on page two. Ultimate success comes when an organization has the ability to be proactive with their IoT applications, seizing opportunities and facing challenges at the earliest possible point in time.



CONNECTED: The first step in the Maturity model is to get all the key "things" connected and data ingested into an integrated system for further processing and analysis.

AWARE: With connections made and data ingested, the next step is to gain awareness of critical contextual information such as machine locations or maintenance histories.

REACTIVE: The next level of maturity involves scenarios where organizations take advantage of real-time situational intelligence that enables time critical reactions to information. Examples of this could include machine performance status or weather.

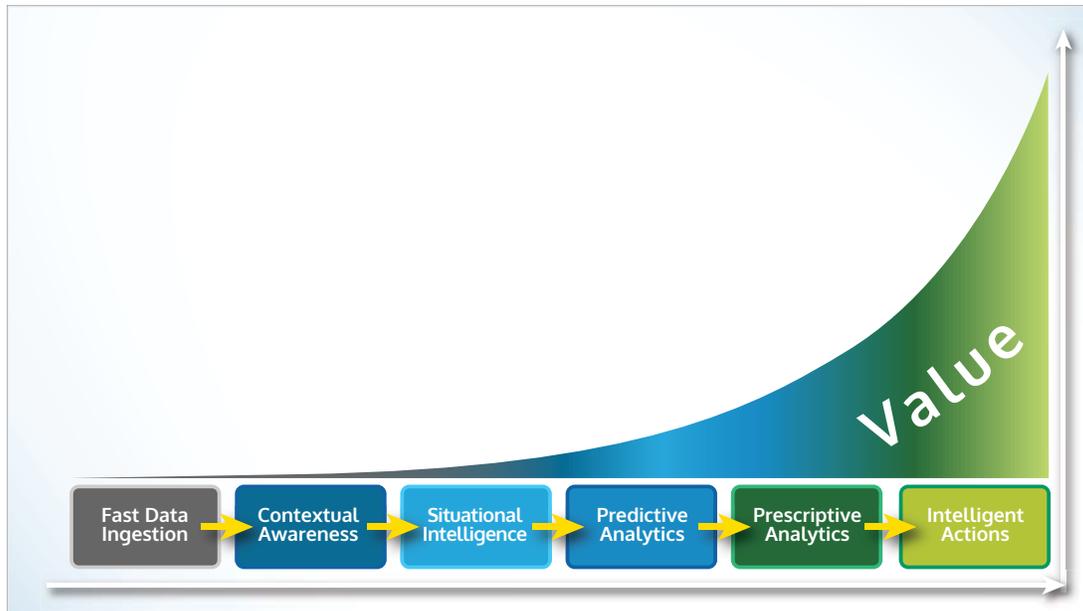
PREDICTIVE: When a company passes from reactive to the predictive stage of the maturity model, a significant transformation has taken place. The organization is no longer simply observing real-time information and reacting, but is now focused on leveraging analytics to make predictions.

PROACTIVE: The fifth and final stage of the model is reached when organizations go beyond merely making predictions to using prescriptive analytics to take intelligent actions to capture value. Examples include recommending specific maintenance on a machine with instructions for a technician.

Achieving maturity with IoT analytics requires a conscious and defined methodology to achieve business results. This Maturity Model goes hand in hand with the Analytics Value Chain concept that is core to Vitria's IoT Analytics Platform.

Vitria's Analytics Value Chain – The Key to Timely Outcomes in IoT

Analytics on the tremendous volume of data in The Internet of Things (IoT) offers great potential to create new business value – but it requires a unified approach to analytics. Analytics must be executed in real-time across the Analytics Value Chain (streaming, historical, predictive, and prescriptive analytics) with relevant contextual and situational data. This capability paired with the next best action creates the greatest value - as shown in the figure below. Vitria's Advanced Analytics Platform for IoT is the fastest way to achieve these results.



- 1) Ingesting data at speed and volume from IoT sensors and devices sets the stage for additional processing.
- 2) This data is then correlated with contextual and historical data to provide a baseline for advanced analytics. Contextual data can include information like geographic data or historical sales information.
- 3) Situational data and intelligence is the next stage of refinement and increased value. This includes information such as weather or customer location.
- 4) The next step is to predict failures, anomalies, or patterns using predictive analytics based on machine learning over historical and situational data.
- 5) The next step in the analytics value chain are to apply prescriptive analytics to determine the next best action. This could be a wide variety of actions such as better customer service or avoiding equipment downtime.
- 6) The final critical step in the value chain is to execute the real-time action to capture value.

About Vitria Technology

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.