AVEVA™ Advanced Analytics
Use our new AI-driven tools to realize process efficiency gains

The industrial world is changing at a rapid pace. Current estimates predict that installed IoT devices will increase by 18% to 14.4 billion this year. In response, industrial operations are looking for new ways to collect, process, and analyze massive amounts of real-time and historical data. Currently, 87% of manufacturing enterprises are using cloud implementations, and 85% plan to implement artificial intelligence (AI) and other digital transformation initiatives in the next three years. And for good reason: According to McKinsey, companies that are further along the digital journey are realizing at least 7% more revenue growth than industry peers and near 6% more EBITDA growth.

As industrial decision-makers look to find new tools and technologies to accelerate their digital transformation journeys, AI and machine learning (ML) are at the top of their lists. AVEVA Advanced Analytics brings the power of AI and ML into the cloud to enable you to generate real-time predictive and prescriptive insights so you can maximize production efficiency.

What is AVEVA Advanced Analytics?

Using AVEVA Advanced Analytics, you can build no-code, AI-driven models to understand even slight process deviations and how they impact the production process—which ultimately allows you to improve quality, energy efficiency, and throughput. With system-generated prescriptive actions, you have the guidance you need to make data-driven and confident decisions. This loud-based solution is ready to use right out of the box—no coding or maintenance needed.

AVEVA Advanced Analytics integrates with AVEVA™ PI System™ and is powered by AVEVA™ Data Hub, a cloud-native data-sharing platform. Together, these solutions enable you to collect and aggregate data from multiple sources, share data and insights with internal and external stakeholders, and use integrated, fully packaged dashboards and analytic reports.

> A large consumer products manufacturer used **AI and ML to reduce its global energy footprint by 5%** across all utilities in one year, including water, air, gas, electricity, and steam.

Predict quality to minimize waste

From scrap to frequent line startups to formula changes, every change you make affects quality. AVEVA Advanced Analytics combines inputs from a variety of process measurements such as moisture and density, with product characteristics from different stages of the production process. This allows you to measure and predict quality before the batch is finished—and make adjustments in real time. Not only does it ensure you're producing an in-spec product every single time to reduce or eliminate recalls, but it also reduces waste and scrap associated with quality adjustments.

Predict energy efficiency to reduce your carbon footprint and CO_2 emissions

Sustainability is a top priority for most industrial operations. Managing your energy usage will not only reduce costs, but it will also make your production process more environmentally friendly. With AVEVA Advanced Analytics, you can use AI and ML to identify patterns and conditions to predict energy efficiency and determine the best operating conditions to minimize energy consumption. You can also use predictive models to identify processes that minimize energy consumption when assets are not running.

Predict throughput to operate at the highest possible production rate

The more you can shorten production time, the more you can increase efficiency and realize cost savings. Simple, right? While achieving these efficiency gains has traditionally been difficult, the AI- and ML-powered models within AVEVA Advanced Analytics use thousands of process variables to generate patterns and conditions to help you operate at the highest possible production rate. Operators receive alerts with recommendations for action, and engineers can take a high-level look at the best operating conditions to maximize production.

Take your production processes to the next level

AVEVA Advanced Analytics gives you the real-time insights you need to predict quality, energy efficiency, and throughput so you can make in-the-moment decisions that benefit the bottom line. With AVEVA Advanced Analytics, both historical and real-time data are stored in the cloud, giving your teams access to insights anytime and anywhere. Now, your operations floor personnel, such as floor operators, supervisors, quality managers, process engineers, sustainability managers, and more, can work together with your data science teams and subject matter experts from all parts of your organization.

With AVEVA Advanced Analytics, our customers have netted a 10x return on subscription investment, improved uptime by 12%, reduced energy costs by 4%, achieved 100% first-pass quality, and reduced hardware, development, and consulting costs by 90%.

Want to learn how we can help you take your industrial operation to the next level with AVEVA Advanced Analytics?

Talk to one of our experts today

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Petra has over 20 years of experience in IT and 10 years in the field of asset performance management. She is a subject matter expert on asset strategies and AI and machine learning. Petra is currently focused on how companies can connect data, people, processes, and technology to achieve a quick ROI on investment initiatives and exceed their reliability, safety, and sustainability goals.

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