Braincube and RapidMiner: Perfect Industrial Processes with IIoT and AI

Braincube's Industrial Internet of Things (IIoT) suite and RapidMiner's Enterprise AI Platform Maximize Overall Analytical Effectiveness together

In industrial settings, intuition, engineering experience and gut feelings have historically driven most decision-making. But with data volumes now at massive scale and variety, intuition and experience is no longer enough -- especially in hyper-competitive industrial markets. An analytics skills gap blocks change in many organizations. This Overall Analytical Effectiveness solution is a cohesive strategy and infrastructure built on Braincube's IIoT platform suite and RapidMiner's data science platform.

While most manufacturers strive to maximize their Overall Equipment Effectiveness (OEE) the Braincube and RapidMiner solution allows its users to maximize **Overall Analytical Effectiveness (OAE)** in order to create vast competitive advantages for their organization.

You Probably Know OEE, it's Time to Optimize Your OAE

AVAILABILITY	Unplanned and planned stops—an availability score of 100% means the process is always running during planned production time.	Data is readily accessible, understandable, and easy to analyze when decisions need to be made—on-the-fly and on-demand.
X		
PERFORMANCE	Slow cycles and small stops—a performance score of 100% means when the process is running it is running as fast as possible.	Analysis is enhanced by AI/ML—providing predictions and prescriptions that can perform much better than humans alone.
X		
QUALITY	Defects, including parts that need rework—a quality score of 100% means there are only good parts being produced.	Producing actionable outcomes with measurable results that's easily replicated across multiple sites.
=	**OEE**	**OAE**

What is Overall Analytical Effectiveness?

Industrial Process Data Availability

With the Braincube and RapidMiner solution, data is readily accessible, understandable and easy to analyze when decisions need to be made – on-the-fly and on-demand. The joint solution connects to OT and IT production data and simplifies data cleansing, management and transformation. Data is also contextualized to improve ML model development, such as indicating which variables are controllable.

20x
faster and more accurate predictions using AI with IoT than traditional approaches

60%
annual growth in IoT usage in industrial settings

$27B
invested in AI by manufacturers by 2027

3x
more data science job postings than job searches in manufacturing

High Performance Decision-Making

Braincube and RapidMiner help their customers enhance analysis and decision-making with AI/ML, providing predictions and prescriptions that outperform human intelligence alone. The joint solution features multivariate predictions, simulations, clustering and outlier detection powered by cleaned, transformed industrial data, all created easily and without requiring data science expertise. Dashboards, reports and visualization apps not only present data, but also predict the future, prevent mishaps, and exponentially increase team's efficiency.

Quality Outcomes

Braincube and RapidMiner produce quality, actionable outcomes with measurable results easily replicated across industrial sites, product lines and departments. Improvement is continuous, as models can be monitored to see how they perform over time, tuned or swapped for superior models as productional or environment processes change. This spearheaded solution measures model ROI over time, so everyone from the production line to leadership understands the continuous value achieved.

Benefits of the Braincube/RapidMiner Solution

Lower Operating Costs

Braincube and RapidMiner empower industrial organizations to address hidden inefficiencies in their processes, which are only discoverable through data analysis AI.

Reduced Risk

Disaster scenarios are more easily avoided when Braincube and RapidMiner combine to predict and prevent problems before they happen.

Increased Revenue

Using Braincube and RapidMiner, industrial organizations find new ways to produce more efficiently, creating better margins and revenue generation opportunities.

Greater Skill and Staff Leverage

Braincube and RapidMiner are designed to be deployed and used without requiring extensive data science skills so that companies can focus on upskilling and empowering existing staff to reimagine their daily work.

ABOUT BRAINCUBE

Braincube is an IIoT platform suite with business and expert apps designed for manufacturing. Braincube empowers you to take control of your data and transform your operations. Braincube makes it easy to use your historical data and understand how to improve your processes. True transformation begins when you understand how your problems are interrelated and which can give you the biggest lift towards your goals. Braincube gives you that power. Learn more at www.braincube.com.

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