



**Rockwell  
Automation**

# Reshaping what's possible with Industrial Analytics

Unlock scalable enterprise insights through unified data and integrated systems



# Infuse intelligence into your enterprise with actionable insights

Your business runs on decisions, from optimizing your workforce to tuning your process control parameters. The ability to quickly address these business questions while laying the foundation for continuous improvement is crucial to maintaining your competitive edge.

Intelligent enterprises become industry leaders by harnessing the power of their data. Through industrial analytics, these leaders uncover scalable, enterprise-level insights and actionable outcomes. More recently, the increasing connectivity between business functions and systems has expanded the scope of analytics to include enterprise-level use cases like multi-site benchmarking, workforce optimization, and process & supply chain optimization.

This expansion is fueled by emerging technologies that provide a holistic view of global operations and deliver insights to the

appropriate person or system at the right time. Traditionally, operational technology (OT) data has not been available to information technology (IT) applications. The Industrial Internet of Things (IIoT) and edge analytics are changing this paradigm through improved IT/OT convergence. Combined with cloud analytics and Big Data capabilities, organizations are empowered to uncover deeper insights across the enterprise. Manufacturers that capitalize on this enriched OT data and analytical capability are unlocking site-wide gains by widening previous manufacturing asset chokepoints. And Augmented Reality is making it easier than ever to deliver actionable insights to the workforce in real time.

Powerful analytics are foundational to your next transformation initiative – can your current analytics capabilities take your enterprise to the next level?



By the end of 2024, **75% of enterprises** will shift from piloting to operationalizing AI, driving a 5X increase in streaming data and analytics infrastructures.

Source: [Gartner, Gartner Top 10 Trends in Data and Analytics for 2020](#), Laurence Goasduff, June 9, 2020





# World-class organizations are raising the bar with Industrial Analytics

**\$2.5M**

annual revenue  
increase realized by a  
whisky legend

**16%**

increase in equipment  
availability attained by a  
major tire manufacturer

**4%**

reduction in product  
rework reached by a  
leading CPG manufacturer

# Launch your journey with analytics capabilities built for the industrial enterprise

While analytics technology has advanced significantly in recent years, the industrial setting presents unique challenges to applying analytics.

In manufacturing data, context is essential. Without a deep understanding of the underlying manufacturing processes and circumstances associated with your OT data, it's nearly impossible to derive meaningful insights that can be integrated back into the manufacturing process for improved performance. It's crucial to unite data from your disparate and legacy OT systems while maintaining OT context after IT/OT convergence.

To further complicate the process, industrial analytics applications often require actionable insights in near-real time. A predictive model for engine failure is only valuable if its prediction

comes early enough to avoid the failure. This requires managing a high volume of information generated at the edge and delivering insights to the right person or system with low latency.

These unique challenges make it critical to take an analytics approach specifically tailored for manufacturing to accelerate business outcomes. Only a partner with a strong heritage in manufacturing combined with innovative IT/OT convergence technology can unlock your digital potential.

The strategic analytics approach and full-stack capabilities offered by Rockwell Automation accelerate your time to value by simplifying the practice of data science, extending insights to drive action in real time, and enabling flexibility at enterprise scale.

## CHALLENGES

Managing a high volume of information generated at the edge

Maintaining OT context after IT/OT convergence

Integrating data from disparate and legacy systems

Delivering actionable insights in real time

Leveraging deep process and domain expertise

# Simplify the practice of data science

Democratize data science with analytics solutions from Rockwell Automation that make data science capabilities accessible to anyone. Our solutions accelerate IT/OT convergence and empower domain experts so you can focus on business outcomes that matter.



---

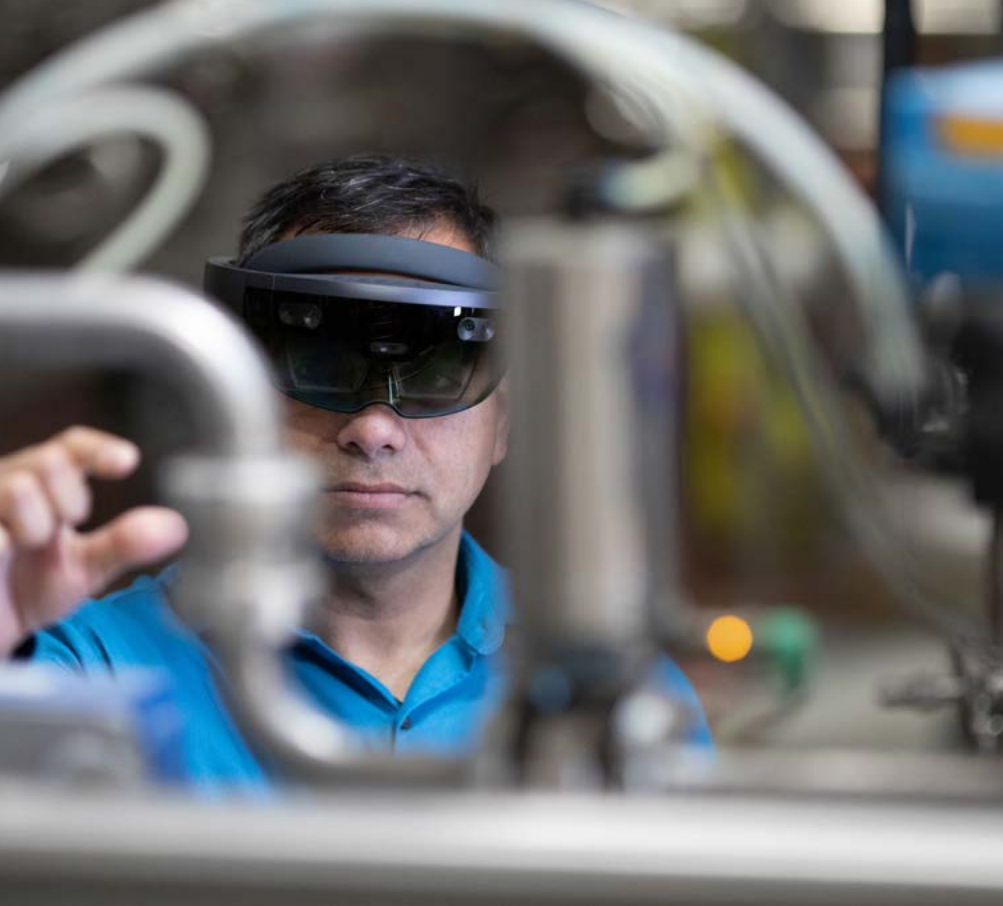
## Accelerate IT/OT convergence

Automatically discover and gather high-speed OT data with rich context using the Common Information Model powered by FactoryTalk® Smart Object technology. Building in OT context at the source can remove up to 70% effort from the data preparation stage of analytical modelling and provide easily consumable contextualized data to upstream IT applications.

---

## Empower domain experts

Innovative solution templates from Rockwell Automation put data science in the hands of the people that know your processes best. The out-of-the-box functionality, informed by decades of industrial experience, equips domain experts to solve common industrial use cases leveraging automated Machine Learning and model building tools.



# Extend insights to drive action in real time

The value from analytics is realized only once an action is taken, or not taken, as a result. Integrated, full-stack analytics from Rockwell Automation connect your people and systems to the right insights when they're relevant to enhance decisions in real time.

---

## Equip your people with actionable insights

Your workforce shouldn't rely on intuition-based decisions. Arm your people to enact change by converging and extending impactful insights with a comprehensive IIoT platform. Take accessibility one step further with integrated Augmented Reality that seamlessly extends actionable insights directly to operators on the shop floor.

---

## Automate processes with intelligent systems

Improve asset and plant efficiency with predictive and prescriptive insights automatically operationalized at the edge. This low-latency inferencing powered by edge analytics optimizes process control parameters against shifting conditions to reduce scrap, improve quality, and increase throughput in asset, line, or site-wide applications.



# Enable flexibility at enterprise scale

To transform industrial performance, global manufacturing enterprises need to scale analytics insights across the enterprise. Maximize your results from industrial analytics with scalable enterprise insights and the flexibility to deploy analytics wherever you need to.



---

## Unlock deeper, enterprise-level insights

Increasing data and system integration enables enterprise analytics use cases that expand beyond asset utilization and overall equipment efficiency. Leverage full-stack capabilities to benchmark performance across multiple sites, maximize workforce productivity, and optimize global supply chains.

---

## Optimize for speed and scale

Capitalize on the benefits of both edge and cloud computing with the flexibility to train and deploy analytical models anywhere from edge to cloud depending on the use case considerations. This approach broadens the data available for model training while enabling model deployment close to the source.

# Achieve your potential with Rockwell Automation as your trusted analytics partner

As both a global manufacturer and leading technology provider, Rockwell Automation is uniquely positioned to drive digital transformation. Our heritage and best-in-class partnerships put Rockwell Automation at the forefront of IT/OT convergence, helping our customers transform operations data into actionable business insights.

## 100+ years of OT data experience

As an industrial manufacturer, we've built unparalleled domain expertise in operational technology across industries. We're confident in the power of our digital transformation software because we're seeing the benefits of deploying it on our own lines.

## Innovation in IT/OT convergence

As the world's largest company dedicated to industrial automation and information solutions, we're revolutionizing IT/OT convergence. Our FactoryTalk Smart Object technology makes contextual data almost immediately available to bring new plants and new lines to operating targets faster.

Intelligent asset optimization solutions implemented at one Rockwell Automation facility delivered double-digit results including:

**33%**  
increase in  
labor efficiency

**70%**  
increase in  
outputs

**50%**  
reduction in  
training time

## Pre-integration with leading partners

Analytics solutions from Rockwell Automation integrate seamlessly with leading technologies from our strategic alliance partners spanning the IT and OT spectrum. This pre-integration accelerates time to value and delivers the flexibility you need to tackle whatever comes next.


## World-class analytics consulting

We incorporate learnings from our impressive analytics implementation portfolio into every customer project. With broad industry expertise and customer success stories ranging from a single asset to a global enterprise, we're ready to help you achieve your potential.



Ready to take your industrial performance to the next level?

Visit **rok.auto/IndustrialAnalytics**  
to learn more

Connect with us.    

[rockwellautomation.com](http://rockwellautomation.com)

expanding **human possibility**<sup>®</sup>

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

ASIA PACIFIC: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Expanding Human Possibility, FactoryTalk, and FactoryTalk Smart Object are registered trademarks of Rockwell Automation, Inc.  
Trademarks not belonging to Rockwell Automation are property of their respective companies.

Publication INFO-BR0016A-EN-P - October 2020  
Copyright © 2020 Rockwell Automation, Inc. All Rights Reserved. Printed in USA.