

# Unlock the industrial enterprise of tomorrow

Accelerate and simplify transformation with FactoryTalk® InnovationSuite, powered by PTC





# Is your organization ready for transformation?

Industrial manufacturers are dealing with increasingly intense downward pressure on margins, rapidly evolving demand, an aging workforce, and a radically shifting competitive landscape. To maintain their competitive advantage, world-class organizations are investing in digital initiatives to increase production throughput and organizational flexibility while lowering operating costs. However, despite their heavy investment in digital solutions, many manufacturers are struggling to develop an end-to-end strategy that captures value and enables enterprise scale.

It's crucial to take an approach that unlocks your highest-value use cases today while creating a foundation that accelerates future time to scale. Industrial environments are rife with obstacles to digital transformation including legacy assets, poor access to data, and missing operational technology (OT) data context. Without unified connectivity and quality data, it's nearly impossible to create a comprehensive view of operations or derive meaningful insight from OT data. If you add poorly integrated software into this equation, you can expect every implementation to require heavy customization and increased cost.

Starting your industrial transformation journey without the foundational capabilities in place will drastically slow your time to value and inhibit scale. Rapid transformation requires a purpose-built, pre-integrated software suite that delivers a new level of IT/OT convergence, extends insights in real time, and accelerates time to scale across sites.

### FactoryTalk® InnovationSuite, powered by PTC

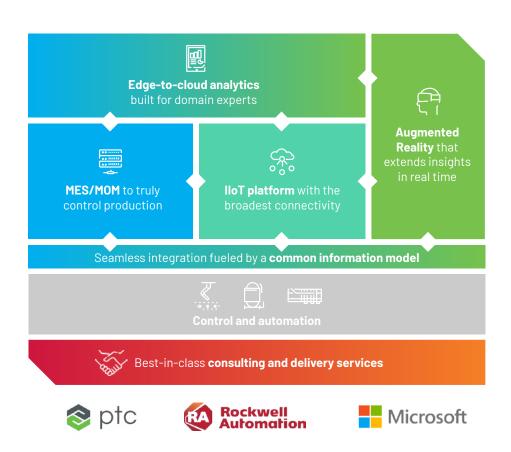
#### The industry's first comprehensive industrial transformation suite

FactoryTalk® InnovationSuite, powered by PTC is the first comprehensive, pre-integrated industrial suite built for innovation at enterprise scale. This full-stack solution simplifies digital transformation and accelerates innovation across the industrial enterprise with unified access to data and seamless integration between the key capabilities needed to realize your digital potential: Industrial Internet of Things (IIoT) and connectivity, edgeto-enterprise analytics, Manufacturing Execution System (MES), and Augmented Reality (AR).

InnovationSuite is the bridge between your operational technology (OT) assets and information technology (IT) systems. With unified data, your people can easily find the information they need to make data-driven decisions. And pre-integration between every InnovationSuite capability makes insights more actionable than ever before through AR visualization and automated MES control response.

Purpose-built for the enterprise, InnovationSuite enables valuable digital projects to be scaled across multiple sites in record time and at reduced cost. InnovationSuite comes pre-integrated with solutions from our best-in-class, edge-to-cloud partner ecosystem and is designed with a wrap and extend approach. There's no need to rip and replace existing technology to adopt this innovative suite and connect data and systems at every level from the control layer to the cloud throughout the enterprise.

Along with our software, end-to-end services from Rockwell Automation unleash the power of possibility throughout the digital transformation journey. Our consulting and delivery teams have the necessary industry expertise to help you every step of the way from defining objectives and building a business case to implementing your priority projects and bringing your intelligent enterprise to life.



PG3

# Choose a partner ecosystem that delivers world-class results







\$1B+

investment in IT digital solutions and partnerships 10+

years of industrial transformation expertise

**34+** proven solutions

400+

successful implementations

# Streamline industrial innovation on the leading IIoT platform



With the broadest IIoT connectivity on the market, InnovationSuite makes it simple to quickly integrate and visualize disparate data in a single pane of glass. Transform production data into actionable insights that help you innovate and optimize your processes across digital engineering, manufacturing, and service at enterprise scale.

#### Establish universal connectivity

Every industrial transformation journey starts with connectivity. InnovationSuite provides a single source for collecting, aggregating, and enabling secure access to industrial operations data. Powered by Kepware®, and with a library of more than 150 device drivers, client drivers and advanced plug-ins, InnovationSuite enables connectivity to thousands of devices and operations data sources.

#### Accelerate IIoT application development

The most successful organizations bring operational intelligence directly to their workforce. Uncover actionable insights and increase efficiency with comprehensive dashboard views of connected devices, system status, and alerts all in a single pane of glass. Build applications on simple, drag-and-drop interfaces to accelerate development or leverage pre-built applications that deliver rapid time to value.

#### Orchestrate data flow across the enterprise

InnovationSuite provides seamless data orchestration between the shop floor and critical enterprise systems. Simple, drag-and-drop tools dramatically reduce the time and effort required to connect cloud and on-premises systems and build automated data flows. And a broad selection of pre-built connectors support common enterprise systems and standard databases, reducing customization time.

# Transform operational data into actionable insights with analytics



InnovationSuite uses artificial intelligence and machine learning to simplify and automate the gathering and analysis of complex IT and OT data, learning from and building on its knowledge base for future analyses. The integrated suite collects, organizes, and contextualizes data in real time to provide actionable insights and recommendations about upcoming issues and opportunities.

#### Build in OT context at the source

The Common Information Model from Rockwell Automation, powered by FactoryTalk® Smart Object technology, is built directly into the control layer and transforms raw data from tags into a logical data structure. This drastically reduces data engineering effort by automatically enriching data with OT context at the source and delivering contextualized data to upstream IT applications.

#### Deploy analytical models for any use case

InnovationSuite has the flexibility to address all your analytics uses cases, from simple to complex, at the edge or in the cloud. Our real-time monitoring and OEE solutions bring operational intelligence to the shop floor for improved decision-making. For more advanced use cases, InnovationSuite can deliver predictive and prescriptive insights to take the guesswork out of optimization.

#### Put the power of data science in the hands of domain experts

Transform process engineers into citizen data scientists with analytics capabilities built for OT experts. Graphical, no-code environments and automated machine learning empower domain experts with minimal data science experience to apply their OT expertise in data exploration and develop predictive models to increase uptime and improve quality in production.

PG9

# Achieve precise production control with an integrated MES



A Manufacturing Execution System (MES) is the engine that drives and validates all aspects of production and turns analytical insights into reality on the shop floor. The MES capability of InnovationSuite creates the basis for advanced analytics through data collection and enables operationalization of insights at the control level. Establish a clear view of production and quality and enable continuous improvement through an integrated MES.

#### Manage production & quality with industry-specific solutions

Bring agile process enforcement to the shop floor and enable enterprise-wide visibility with MES solutions tailor-made for your industry. Integrated quality and production management solutions provide insight into work in process, make it easier for your workers to do their jobs, and allow you to fine-tune process planning and quality.

#### Gain end-to-end visibility with Asset Performance Management (APM)

The InnovationSuite APM solution improves decision-making on the factory floor by providing both real-time visibility into production and historic performance reports. Armed with insights on active alarms and current OEE levels, your employees can act quickly to maximize production while historic efficiency reports fuel your continuous improvement efforts.

#### Add production context to data with seamless integration

Through integration from the control layer to the cloud, the InnovationSuite MES is your foundation for connecting production to your organization's critical systems. InnovationSuite reaches all aspects of operations – from controllers and historians to enterprise systems like ERP – to provide desperately needed production-level data context.

# Modernize your workforce with Augmented Reality



The InnovationSuite Augmented Reality (AR) platform enables rapid AR content creation and delivery that transforms your operations, facilitates knowledge transfer, and improves your profitability. Easily-consumable instructions integrated with new or existing media content/capture, 2D and 3D content, sequences, IloT data, and real-time annotations provide the information your people need to reach their potential.

#### Enhance employee training with immersive work instructions

Hands-free procedural recording empowers domain experts to scale their standards of excellence to the workforce through immersive AR experiences. These augmented work instructions provide on-demand guidance and clear safety instructions for new operators on the shop floor, accelerating employee ramp time and increasing worker effectiveness.

#### Improve productivity with real-time insights

Seamless integration expands what's possible through AR visualization. Truly immersive AR experiences provide a new level of clarity to workers with live IIoT data and 3D CAD overlays visualized on top of the physical world. These experiences highlight issues in real time and display pertinent device information to your employees on the shop floor in place of an HMI or paper manual.

#### Accelerate problem resolution with remote collaboration

AR remote assistance solutions enable operators on the shop floor to collaborate with technical experts no matter where they're located. A shared audio and visual application allows the expert to see what the operator sees and provide annotations that stick even while the user moves. This enhanced collaboration environment improves first-time fix rates while decreasing the need for onsite visits.

### Getting started with **InnovationSuite**

Without a value-driven approach, transformation can be a daunting task. Luckily, InnovationSuite is built for the journey - delivering on use cases today while laying the foundation for extended capabilities in the future. Our robust suite of market-leading industrial solutions allow you to capture exponentially more value, faster and with the flexibility you need to transform your operations.

Improve overall efficiency by up to 20%

#### Scalable production management

Bring agile process enforcement and dynamic scheduling onto the shop floor to reduce the cost of inventory, improve quality and accelerate time to market. Real-time production performance monitoring solutions and Al-enabled predictive tools deliver detailed insights into work in process that help you fine-tune production processes and planning.

Reduce unplanned downtime by up to 30%

#### Intelligent asset optimization

Leverage real-time monitoring and critical insights form predictive analytics to avoid unplanned downtime and maximize asset utilization. Intelligent asset optimization solutions provide visibility into your assets' capacity, performance and health status so you can start transforming your factory floor with asset monitoring and predictive maintenance.

Increase global production by up to 8%

#### Enterprise operational intelligence

Gain visibility from your top floor to the shop floor to reduce the cost of operations while increasing the flexibility and agility of your manufacturing networks. Enterprise operational intelligence solutions enable real-time, enterprise-wide performance management and analytics that allow you to optimize your global supply chain and plant performance across regions.

PG9

Boost worker productivity by up to 40%

#### Digital workforce productivity

Empower your workforce with actionable, augmented intelligence that improves productivity and quality while avoiding safety and compliance risks. Digital workforce productivity solutions provide role-based applications, digital work instructions, and real-time, Al-driven insights to improve any employee's productivity regardless of their level of expertise.



### Your ingenuity unleashed

Simplify digital transformation and accelerate innovation with the first comprehensive, pre-integrated industrial suite built for enterprise scale: FactoryTalk® InnovationSuite, powered by PTC. InnovationSuite is designed to tackle your high-value use cases today while laying the foundation for future scale and extensibility.

# Grow with a world-class partner ecosystem

FactoryTalk® InnovationSuite, powered by PTC is the product of 100+ years of OT experience married with a \$1B+ investment in IT solutions and innovative partnerships.

InnovationSuite brings together leading capabilities developed by market leaders across the IT and OT spectrum like PTC, Microsoft Azure, and other strategic alliance partners.

# Simplify transformation with pre-integration

Seamless data flow is instrumental to removing friction from your digital initiatives. Every capability within InnovationSuite comes pre-integrated with a shared, configurable data model that makes enriched OT data accessible to upstream IT applications and serves as the information bridge between existing and future enterprise systems.

## Capture value with best-in-class services

With deep industry and technology expertise, our best-in-class delivery and consulting teams are equipped to drive your aspirations to reality. With a library of more than 30 solution templates and 400 successful implementations, our teams have perfected the art of identifying your priority projects and driving them to value at speed and scale.

# Extend and scale capabilities with ease

InnovationSuite isn't a point solution – it's the last industrial transformation software you'll ever need. InnovationSuite delivers a platform for transformation that enables solutions to be scaled across lines and plants at reduced effort and cost while extending capabilities and value beyond the scope of the initial implementation.

### Your factory of the future awaits

The most successful business of the future will be the one that brings operational intelligence to its human developers. Take the next step toward transformation with a platform that enables you to innovate how you optimize your operations, how your employees work and how you manage your enterprise.

FactoryTalk® InnovationSuite, powered by PTC and enabled by the Microsoft Azure IoT platform, provides the best of today's IIoT, data analytics, MES, and AR in one comprehensive solution. From the shop floor to the top floor, real-time operational visibility unleashes the power of possibilities for greater innovation, efficiency and profitability.

#### Prepare for innovation

Visit **www.factorytalkinnovationsuite.com** to learn more about the industry's first comprehensive, purpose-built industrial transformation platform.

Connect with us. (f) (in)

AMERICAS: Rockwell Automation, 1201 South Second Street, Mllwaukee, 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, FactoryTalk InnovationSuite, powered by PTC, and FactoryTalk Smart Object are registered trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.