



# The Operations View—Attributes of an Advanced Smart Manufacturing Platform

FROST & SULLIVAN WHITEPAPER



# The Operations View

Plex, a Rockwell Automation company, offers a multi-tenant SaaS, cloud-native smart manufacturing platform that includes fully integrated, easy-to-deploy solutions for advanced MES, QMS, supply chain management, asset performance management, production monitoring, and plant-level ERP integration. Global cloud providers (hyperscalers) have the IT infrastructure to enable reliable scalability for digital transformation in the industrial space. To this end, Rockwell partners with Microsoft to deliver new cloud solutions for manufacturers, and the Plex platform is available on Microsoft Azure. Together, Microsoft's secure cloud infrastructure, Rockwell Automation's industry expertise, and the Plex smart manufacturing platform bring industry-relevant solutions that empower customers.

Using Plex's cloud-based smart manufacturing platform, manufacturers can connect all aspects of their operations to automate business processes: people, systems, machines, and supply chains. The Plex platform also allows customers to integrate legacy systems under the same data umbrella within the smart manufacturing platform. The Plex solution gives customers a single version of the truth with consistent data sets across all operations. Customers can make decisions rapidly and more accurately using information and insights directly connected to the plant floor.

Plex owns and manages the SaaS technology stack and continuously adds new capabilities, eliminating the hidden costs and risks associated with on-premises and private cloud models. The company meets international information security standards, including the ISO 27001 certification audit. The multi-layered protection maintains the best security practices for its customers, safeguards data, monitors threats, and mitigates risks. Achieving ISO certification reinforces customer trust to protect data and safeguard operations with a certified solution provider. Plex also ensures the highest level of availability with a 99.9% uptime service-level agreement.

For smaller manufacturers and those without large capital funding, the first step in digital transformation should be to seek incremental investments, unlock value out of each step, and use the gains to support other projects for next-phase development and widespread adoption.

To address this incremental approach, Plex has modularized its smart manufacturing platform. The new modular approach gives manufacturers the ability and flexibility to implement one, many, or all of Plex's smart manufacturing solutions, providing a simple path to growth. Manufacturers can seamlessly add capabilities within Plex's



secure manufacturing cloud without complex integrations. The new capabilities require simple activation rather than installation. Plex's new modular approach first addresses manufacturers' most pressing pain points, particularly immediate needs, and provides support as they grow.

To this end, innovative industrial companies look to the cloud for specific applications as initial security, reliability, availability, and affordability concerns are addressed by modern infrastructure. Customer results showcase how companies worldwide benefit from Plex's cloud-delivered smart manufacturing solutions.



**REE Automotive is a technology leader** and electric vehicle platform provider. The company uses Rockwell Automation for its line-side controls. It also adopts the cloud-based Plex MES, which will be rolled out at REE's highly automated and flexible UK-based integration center in Coventry. REE plans to expand globally, with its Austin, Texas, integration center scheduled to be operational in 2023. REE will use the Plex smart manufacturing platform's digital and cloud capabilities for its UK plant and global operations. By deploying Plex's cloud-based MES, REE gains full visibility into production operations and seamless connectivity with ERP systems. The smart platform leads to increased efficiencies and savings across multiple sites and countries. REE can quickly and easily share and scale best practices across all its international sites. For example, fabrication parameters and procedures fine-tuned at the UK plant can be rolled out to all other plants.



**Accuride Corporation is a leading supplier of wheels and wheel-end components** to North American and European commercial vehicle markets. Built through acquisition, the company had seven disparate systems, creating inadequate enterprise-wide visibility for operational performance. As a result, it struggled with data silos, inconsistent processes, labor-intensive data gathering, and poor decision making. Accuride consolidated and transformed its business with Plex's cloud-delivered smart manufacturing solutions. The Plex manufacturing cloud helped Accuride streamline all its processes—from the shop floor to the top floor, supply chain management to production scheduling, quality management to shipping, and inventory management. The company improved its supply chain productivity by 10%, reduced hardware requisition time from days to 30 minutes, and now ships inventory in three hours.



**Shank's Extracts**, a private-label food and beverage manufacturer and Plex customer, saw 99.9% inventory accuracy with real-time tracking and control capabilities. Plex's solution enabled Shank's Extracts to perform quality audits through real-time visibility over production line work and access to data, reducing prep time from two to three weeks of paperwork to zero and consolidating more than 3,300 SKUs into one central location.



**Eurotranciatutura Mexico** is an automotive supplier and leading North American provider of electrical steel laminations. The quality team at Eurotranciatutura uses Plex QMS to accurately record critical information about its products and processes. The automotive supplier reduced scrap rate from 2.5% to 1.5%, improved its on-time delivery to nearly 100%, increased its inventory accuracy from 85% to 99%, enhanced overall equipment effectiveness (OEE) from 65% to over 70% for non-automated operations, and increased OEE of its automated operations from 85% to 90%.



**G&W Products**, which does contract metal manufacturing and coating, used Plex manufacturing analytics to closely study how it operates. G&W recognized a 25% reduction in inventory, increased on-time delivery from mid-80% to 98%, saved eight hours weekly on manual report creation, and achieved 176 overall PPM with Plex analytics.

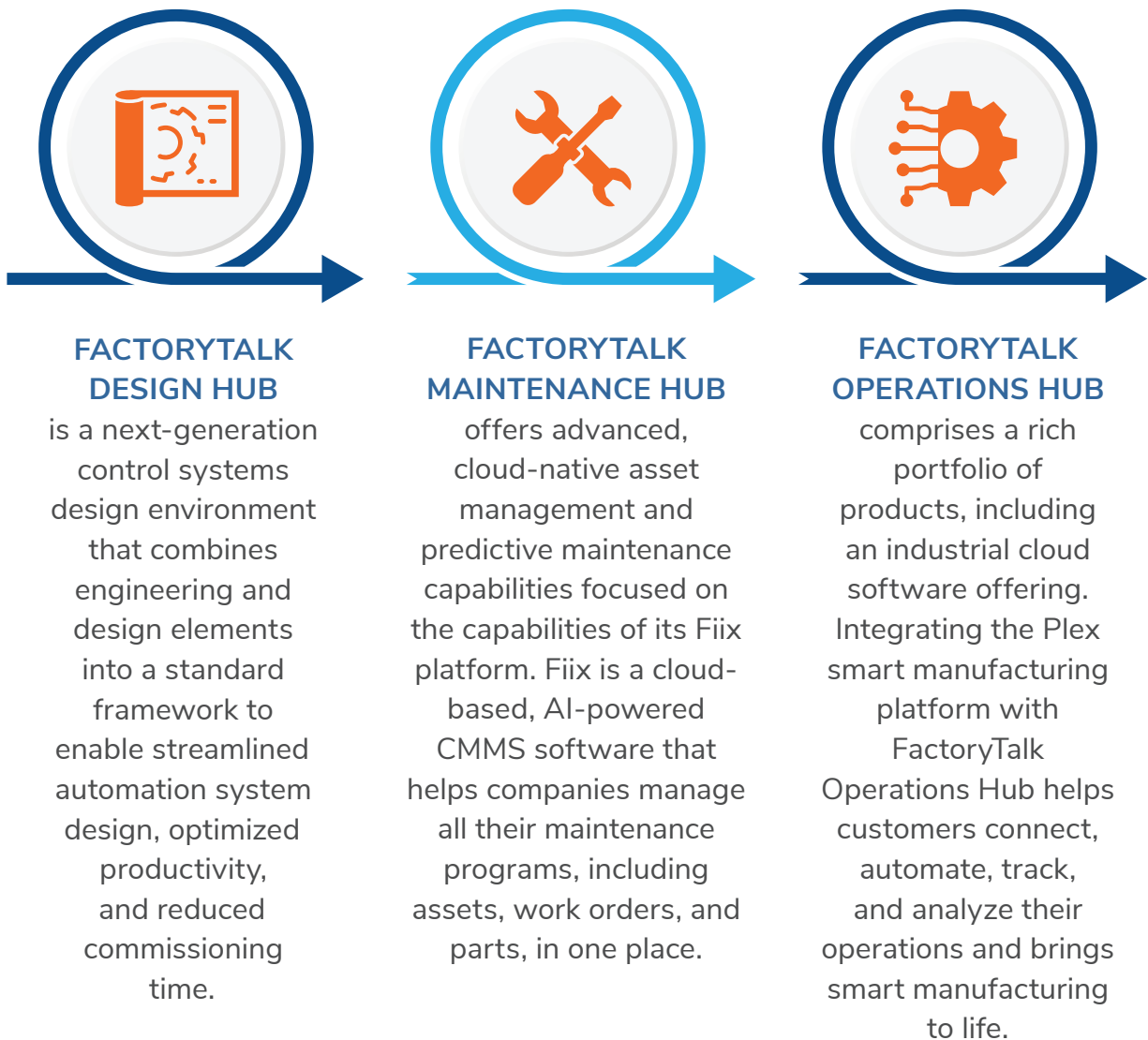
Using MES, QMS, production management, and manufacturing analytics, the above use cases illustrate companies' use of Plex's cloud-delivered solutions to transform business performance. Frost & Sullivan believes that Plex delivers a scalable, modular platform that can future-proof a customer's business with the power of smart manufacturing.



# About the Plex Solution from Rockwell Automation

Rockwell Automation’s value proposition is helping customers across their design, operations, and maintenance workflows. The company offers industry-leading domain expertise and a full suite of hardware and software products via its FactoryTalk Hub, supporting its customers’ hybrid environments.

The Rockwell Automation FactoryTalk Hub utilizes Microsoft Azure to deliver modern industry solutions and consists of several components:





The global availability of Plex solutions comes at the right time when more customers are moving their industrial applications to the cloud and upgrading their production systems with modern, cloud-based systems to improve resiliency, agility, and sustainability. Customers struggle to integrate and scale legacy solutions across their operations. Rockwell Automation's cloud-based Plex solution addresses this customer need and accelerates the transformation of industrial operations with advanced capabilities. The availability of Plex on Microsoft Azure also supports customers with local data residency requirements.

Manufacturers need a single, digital, modularized, cloud-based smart manufacturing platform with a suite of products such as MES, quality, supply chain planning and management, and IIoT to respond to any market adversity with agility and stay competitive in 2022 and beyond. Plex on Microsoft Azure from Rockwell Automation is ideally suited to meet these demands. Rockwell Automation utilizes its feature-rich portfolio of products to satisfy customer needs, making the company the partner of choice for digital transformation.

## Next Steps

- ➔ Explore the Rockwell Automation [Digital Transformation website](#) to take the next step on your digital transformation journey
- ➔ View the [success stories](#)
- ➔ Learn more about the state of smart manufacturing in Rockwell Automation's [report](#)
- ➔ Watch our Digital Transformation [playlist webinars on demand](#)

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