Next-Generation Manufacturing
A digital transformation to support rapid decision-making and help unlock new value
Bringing new digital capabilities to manufacturing offers the potential for new value, but many organizations have struggled to get going. And there are plenty of good reasons.

For starters, the amount of data has become overwhelming for manufacturers. Each layer and node of a transaction creates new data. But what can you do with it? What should you do with it? At the same time, business and IT leaders at manufacturing companies are under increased pressure to collect more data and leverage it to improve planning and generate new efficiencies.

Second, many manufacturers continue to operate with ERP systems that they have had for decades, customizing them as the business, the market, and capabilities have evolved. Increasingly, these legacy systems have become costly to maintain and enhance. But how do you make the move to something new—and what do you select?

**A sharper edge with SAP S/4HANA**

The latest release of SAP®’s flagship business suite—SAP S/4HANA—has garnered plenty of attention across industries. For manufacturers, SAP S/4HANA offers organizations a digital core ERP that can bring even more clarity to finance, realize even more value throughout the supply chain, engage customers more meaningfully, empower the workforce in new ways, and leverage analytics to get new insights for decision-making across the enterprise.

Deployed effectively, SAP S/4HANA can help organizations develop the edge they will need as the digital business realm evolves. Ultimately, SAP S/4HANA can help manufacturers transform the entire supply chain, supporting their ability to make decisions rapidly and accurately across the entire spectrum of their operations.

The solution’s strength lies at the intersection of analytics, functionality, and the user experience. With SAP S/4HANA, manufacturers can improve the data picture and provide instant answers on costs, spending, resources, and more. Manufacturers, for example, might face complex questions about sourcing-related costs in rapidly moving markets. They might want instant information on incidental expenses for expediting freight—or one-time supplier charges for special orders. Need to make ad hoc changes for massive orders? SAP S/4HANA can help. And it can do a lot more. Ultimately, it can help you transform decision-making and take customer service to the next level.

By transforming your business processes and aligning them effectively with SAP S/4HANA, you can begin unlocking value that can help you sharpen your competitive edge and deliver next-generation manufacturing capabilities. Here’s a look at some of the possibilities.

**Support reliable, real-time decision-making**

SAP S/4HANA can enable reliable, real-time decision-making by leveraging data across the digital enterprise—in turn supporting your ability to reduce manufacturing costs, improve inventory accuracy, and adjust production schedules to align with demand...
“Planners can easily scan information on supply status, simulate alternative scenarios, and take preventive measures—all to minimize interruptions in production.”

changes. The key lies with SAP HANA® and its in-memory processing capabilities, handling massive amounts of data through a more efficient and more powerful database. Data extracted from databases is aggregated and analyzed exclusively in the application layer—meaning you can make proactive decisions as events and scenarios change.

**Take advantage of preventive planning controls**

SAP S/4HANA provides real-time monitoring and generates alerts from multiple data streams, which can help planners address scheduling and execution issues in the very early stages. Material planners can gather real-time insights on stock and material flow thanks to prebuilt analytical views. The payoff? Planners can easily scan information on supply status, simulate alternative scenarios, and take preventive measures—all to minimize interruptions in production. Ultimately, having clear visibility across operations can increase efficiency and drive user adoption.

**Experience simplified MRP—MRP Live**

SAP S/4HANA delivers optimized material requirements planning run on SAP HANA—MRP Live. MRP Live is a simplified and effective functionality that reads all the demand and supply elements and then proposes the supply schedules for internal and external suppliers, all in one database procedure. With MRP Live, planners can determine material shortage issues in real-time—across the enterprise—and respond accordingly. Advanced delivery scheduling capabilities also allow planners to focus on more strategic needs, such as negotiating contracts with suppliers.

**Run classic MRP faster**

SAP S/4HANA can run classic MRP faster, allowing planners to conduct planning runs more frequently. With faster MRP runs, new working models, and reduced cycle time, MRP controllers can make decisions more rapidly and efficiently. They also can more effectively manage and track change requests from internal and external customers, with SAP S/4HANA generating possible solutions to address material shortages and other issues that arise. Plus, a new available-to-promise (ATP) algorithm helps planners address supply and demand synchronization and real-time back-order processing.

**Improve monitoring of available capacity**

SAP S/4HANA can help planners optimize production schedules thanks to its ability to support real-time inventory monitoring, its flexibility for tailoring available capacities, and its ability to automate the creation of procurement proposals. That functionality helps SAP S/4HANA support on-time delivery and eliminate revenue losses due to stock-outs. SAP S/4HANA also can collect data from production lines.

**Producing new possibilities**

Some potential benefits manufacturers could see from effectively transforming the enterprise with SAP S/4HANA:

- Reduce manufacturing cycle time by 6-10%
- Reduce manufacturing costs by 4-8%
- Boost MRP efficiency by 15-30%
- Improve subcontract manufacturing efficiency by 5-10%
- Increase labor utilization by 6-12%
automatically, to track the throughput efficiencies by individual lines, by shift, or even by resource. Real-time alerts and notifications, meanwhile, help decision-makers adjust equipment outputs and meet production goals.

**Leverage predictive analytics and simulation**

The analytics capabilities of SAP S/4HANA provide real-time functionality that helps enable organizations to create and modify reports, KPIs, or any other analytical artifacts as needed to monitor and improve operational performance. The key? The simplified data model SAP HANA, which supports data analysis at the most granular levels. By providing actionable information to the right decision-makers at the right time, SAP S/4HANA can help organizations gain an insight-driven advantage—getting ahead of challenges and identifying opportunities as they arise.

**Step through the digital gateway**

For manufacturers looking for a way to give their stakeholders the modern digital capabilities they expect, SAP S/4HANA can deliver. The solution provides intuitive, innovative functionality through user-friendly SAP Fiori® apps and role-based analytical cockpits. All in all, SAP S/4HANA can deliver a massively streamlined user experience that helps promote adoption while enabling manufacturers to run simple in the digital economy.

**Moving toward value**

Transforming your business with SAP S/4HANA will require more than new technology. It will require an ability to think strategically about business processes, your existing data model, reporting needs, and more. A transformation also will require a deep understanding of industry-specific security concerns, technology trends, and evolving market demands.

Deloitte can help. With decades of SAP experience, industry-specific resources, and a global network of more than 16,000 professionals, we understand what it takes to unlock new value with SAP solutions, including SAP S/4HANA. In fact, our SAP S/4HANA strength helped us earn the 2016 SAP® Pinnacle Award as the SAP S/4HANA Adoption Partner of the Year.
Let’s talk

Ready to start moving toward new value? We’re ready to show you what’s possible. Contact us to get the conversation started.

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