PANORAMA CONSULTING GROUP

THE 2025 TOP 10

Manufacturing ERP Systems Report

Table of Contents

Introduction 03

The Top 10 Manufacturing ERP Systems

Artificial Intelligence in Action

- Microsoft 365 Finance/Supply Chain & Business Central 05
- Oracle Fusion Cloud Supply Chain & Manufacturing 06
- SAP S/4HANA 07

Top Manufacturing ERP Systems Continued

- Acumatica Cloud ERP 09
- Epicor Kinetic 10
- IFS Cloud 11
- Infor Manufacturing Cloud ERP 12
- NetSuite ERP 13
- Nextworld 14
- Priority ERP 15

Generative AI in Manufacturing: Driving Innovation & Efficiency 16

Best Practices for Implementing Generative AI 18

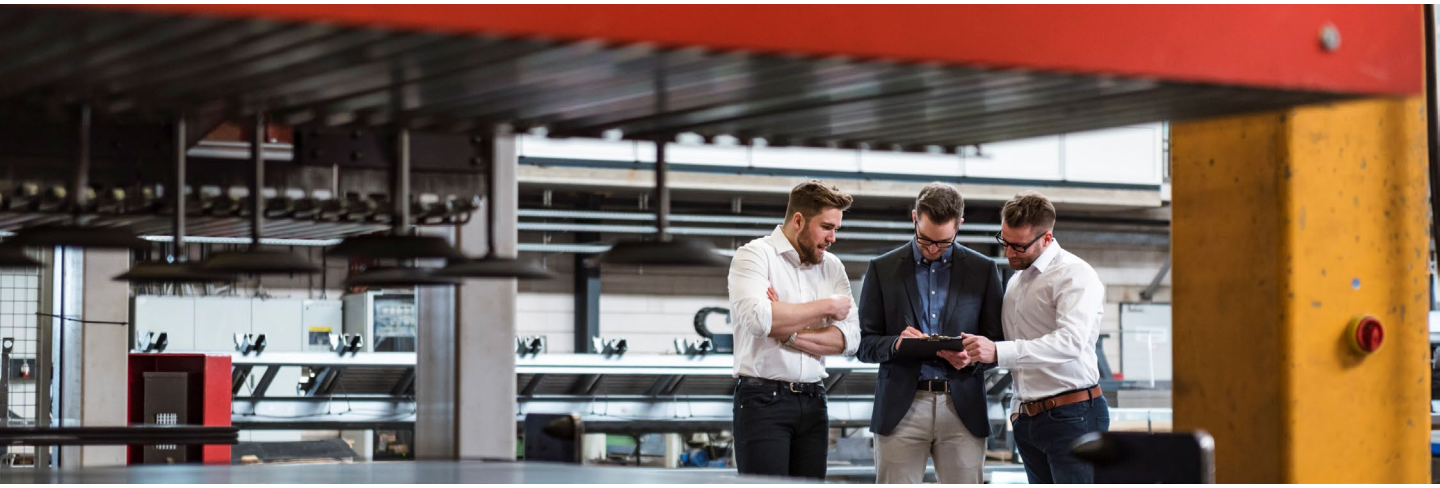
About Panorama Consulting Group 21

Introduction

Inflationary pressures, workforce constraints, and unsteady supply chains are forcing manufacturers to implement innovative solutions to stay competitive. Digital technologies, particularly modern ERP systems, are emerging as critical tools for growth and survival.

This includes ERP software with AI capabilities. Manufacturers are increasingly using these solutions to predict market fluctuations, optimize production schedules, and more.

The 2025 Top 10 Manufacturing ERP Systems Report highlights the leading solutions that are shaping the future of manufacturing. Keep reading to explore the features and functionality of these solutions that are empowering manufacturers to make data-driven decisions and enhance operational efficiency.



Artificial Intelligence in Action

Quick Facts

Headquarters:
Redmond, WA

Ownership:
Public

Founded:
1975

Microsoft

Dynamics 365 Finance/Supply Chain & Business Central

Both of these solutions include the power of the Microsoft platform, which provides integrated reporting and visualization. Business Central is a lower-cost solution that provides a faster time to value.

365 Finance & Supply Chain

- Includes Microsoft Copilot, an AI powered digital assistant that leverages generative AI for advanced scenario planning, operational forecasting, and improved workflow automation.
- Supports trade promotion management, advanced food safety & traceability, commodity contract management, and patron & producer payroll.
- Includes government contracting functionality that supports DCAA, FAR, and CAS audits, cost pools, and project revenue & billing.

Business Central

- Includes flexible manufacturing capabilities that integrate with Azure IoT Hub for real-time monitoring of manufacturing assets and predictive maintenance.
- Includes Microsoft Copilot, enabling product managers to input product attributes that prompt the AI to generate compelling marketing text in seconds.
- Supports cost & profitability analysis which is integrated with Power BI for real-time financial and operational reporting within the Business Central interface.
- Supports trade management, including rebates, promotions, billbacks, commissions, pricing rules, and accruals.

ORACLE®

Quick Facts

Headquarters:
Redwood City, CA

Ownership:
Public

Founded:
1977

Oracle Fusion Cloud Supply Chain & Manufacturing

Oracle Fusion Cloud is a full suite of supply chain and manufacturing applications with functionality for supply chain management, finance, human resources, and customer experience.

- AI Provides AI-powered lead time estimates that use machine learning to highlight variances based on actual performance.
- Includes a Manufacturing Execution System (MES) with a Production Supervisor Workbench that provides real-time insights into work orders and generative AI-powered shift reporting.
- AI Employs generative AI to draft order acknowledgment emails, providing customers with timely and accurate information regarding their orders.
- Includes advanced supply chain execution capabilities like Digital Work Instructions, which help simplify complex assembly operations and enforce procedures.
- Includes supply chain planning functionality like Demand Management, which uses advanced algorithms to analyze historical data and market trends.

Quick Facts:

Headquarters:
Waldorf, Germany

Ownership:
Public

Founded:
1972

SAP S/4HANA

SAP S/4HANA includes ready-to-run cloud ERP software for manufacturing companies. It supports all forms of both discrete and process manufacturing in a single solution, including make to stock/repetitive, make to order, configure, and engineer to order.

- Includes an AI-powered copilot that enables users to ask questions in natural language, while providing answers based on SAP Help Portal documentation and role-based insights on business objects.
- Provides Financial Compliance Management, which includes tools to document internal controls, manage potential risks, and monitor compliance checks.
- Includes R&D/Engineering capabilities that enable collaborative product design, development, and configuration.
- Combines real-time monitoring with AI-powered predictive analytics to identify slow or non-moving stock and suggest corrective actions.
- Includes Sales & Marketing functionality for personalized marketing, omnichannel commerce, quote to cash for configurable products, subscription-based billing, and more.
- Allows companies to take advantage of Industry 4.0 technologies to execute smart manufacturing processes and analyze data in real time.

The Top 10 Manufacturing ERP Systems (Continued)

Acumatica

The Cloud ERP

Quick Facts:

Headquarters:
Kirkland, WA

Ownership:
Private

Founded:
2008

Acumatica Cloud ERP

Acumatica provides a cloud-based ERP with micro-vertical functionality designed for small and mid-sized businesses. It integrates various business functions, including Financial Management, Customer Management (CRM), Manufacturing, Distribution, and more.

- Includes a Financial Management suite with modules for accounting teams, which now include features for prepayment invoices, bank feed file uploads, and bank transaction matching.
- Features AI-powered inquiries, allowing users to leverage AI to identify exceptions or anomalies in transaction reviews.
- Provides a centralized platform with open APIs for easy integrations with third-party applications and services.
- Features a flexible architecture that allows for low-code or no-code customizations.
- Features a two-step receiving process, enabling warehouse managers to verify purchase receipts confirmed by warehouse workers, ensuring correct item quantities before finalizing the receipt.

Quick Facts

Headquarters:
Austin, TX

Ownership:
Private

Founded:
1972

EPICOR

Epicor Kinetic

Epicor Kinetic is a cloud ERP system made for manufacturers. It includes industry-specific solutions and composable capabilities, which can be extended as you grow.

- Offers no/low code configurations – now enhanced by tools like the SQL to BAQ Generator and Test ReCoder for faster implementation and customization.
- Includes artificial intelligence (AI) tools, including the new AI-driven Epicor Learning Knowledge Assistant for both front and back-office efficiency.
- Offers flexible deployment options with added self-service capabilities through the Epicor Cloud Management Portal.
- Enables real-time production and process monitoring through automated data collection from equipment, providing operators with immediate insights via touch-screen interfaces.
- Provides governance, risk, and compliance tools with advanced user roles, secure workflow automation, and comprehensive audit trails.

Quick Facts

Headquarters:
Linköping, Sweden

Ownership:
Private

Founded:
1983

IFS Cloud

IFS Cloud is an industry-focused solution tailored for large and mid-sized organizations. The solution combines Enterprise Resource Planning, Service Management, and Enterprise Asset Management capabilities.

- Integrates emerging technologies including IFS.ai Copilot, an AI-driven assistant that enhances predictive maintenance and intelligent process automation.
- Includes a new Sustainability Management module that streamlines ESG tracking, analysis, and reporting.
- Encompasses Manufacturing Execution System (MES) capabilities for the entire manufacturing process—from design, engineering, estimating, and configuration to operational planning, production, maintenance, delivery, and service.
- Features an AI-powered homepage that provides live project status visibility, automatically detects anomalies, and suggests corrective actions to enhance operational efficiency.

Manufacturing Cloud ERP

Infor's industry-specific CloudSuites include ERP and SaaS cloud applications designed for manufacturing industries at the enterprise level and small to medium-sized businesses. Infor's CloudSuites are cloud-native and available as a service within a secure cloud environment powered by Amazon Web Services.

Quick Facts

Headquarters:
New York, NY

Ownership:
Private

Founded:
2002

- Includes generative AI capabilities that enhance insights into enterprise efficiency, assets, human capital, and more.
- Provides Robotic Process Automation (RPA) capabilities featuring enhanced AI-driven text extraction through integration with Infor Document Processor (IDP).
- Provides enterprise-level business intelligence, reporting, and analytics tools with conditional formatting options.
- Includes pre-built industry capabilities for specific manufacturing industries, like aerospace & defense, automotive, distribution, fashion, food & beverage, and industrial manufacturing.

ORACLE NETSUITE

NetSuite ERP

NetSuite ERP is a full suite of cloud-based ERP applications that help growing manufacturers plan, control, coordinate, and manage every aspect of their operations in one place.

- Includes AI-driven features like Financial Exception Management, which reviews large volumes of transactions to spot anomalies and suggest fixes.
- Includes NetSuite Bill Capture, which provides matching capabilities and variance alerts to reduce manual intervention in the procure-to-pay cycle.
- Includes procurement, planning, and production systems that update inventory and production data, financial reports, and outstanding orders in one place, in real-time.
- Provides real-time visibility into all material, machinery, and labor resources involved in production through features like the Manufacturing Workbench, Work Center Dispatch List, and Shop Floor Control.

Quick Facts

Headquarters:
Austin, TX

Ownership:
Public

Founded:
1998

Quick Facts

Headquarters:
Greenwood Village, CO

Ownership:
Private

Founded:
2016

nextworld®

Nextworld Enterprise Applications Platform

Nextworld's Enterprise Applications Platform (EAP) is a comprehensive, no-code solution with industry-specific modules for custom manufacturing, distribution, inventory-dependent services, and more.

- Built on a composable architecture, allowing businesses to assemble modular components to create tailored solutions that meet unique requirements.
- Incorporates a suite of native AI tools, including a no-code machine learning toolkit for building models, an AI-driven chatbot for user assistance, and a Developer Copilot that aids in application development.
- Allows users to build new applications or customize existing ones without writing code to automate unique business processes.
- Includes comprehensive API support, allowing seamless integration with existing systems and third-party applications.
- Provides advanced reporting tools with real-time insights into business operations, customizable dashboards, and interactive data visualizations.

Quick Facts:

Headquarters:
Tel Aviv, Israel

Ownership:
Private

Founded:
1986

Priority

Priority ERP

Priority ERP is a scalable, open SaaS cloud ERP platform for organizations of all sizes. It is designed for industries such as manufacturing, wholesale and distribution, electronics, healthcare, medical devices, pharmaceutical, nonprofit, construction, professional services, financial services, retail, and more.

- Provides AI recommendations that enable personal workflow automation, display views, and shortcuts based on recurring work patterns.
- Includes retail ERP centralized management software that encompasses retail management systems (RMS) and point of sale (POS) solutions to support omnichannel operations.
- Allows companies to make customizations using no-code intelligent workflows, form design, and a modular platform structure.
- Provides a mobile ERP solution with a wide selection of ready-to-use mobile apps and the option for companies to define their own apps with no need for coding.
- Includes a no-code Portal Generator which allows companies to extend functionality and accessibility by creating web portals for employees, customers, and suppliers.

Generative AI in Manufacturing: Driving Innovation & Efficiency

The manufacturing sector is undergoing a seismic shift, with generative AI emerging as a transformative force. Recent advancements in AI technologies, coupled with greater access to computational power, are enabling manufacturers to accelerate prototyping, optimize resource efficiency, and enhance decision-making.

The Potential of Generative AI in Manufacturing

Generative AI uses algorithms to create new designs, optimize workflows, and forecast trends based on vast datasets. Manufacturing companies are leveraging this technology in several ways:

1. Predictive Maintenance

Generative AI-powered predictive maintenance goes beyond traditional methods by analyzing intricate patterns in equipment data to preempt failures.

For instance, a global automotive manufacturer might reduce downtime by using AI-driven digital twin models to simulate real-time equipment performance and schedule maintenance more precisely.

2. Sustainable Product Design

Generative AI is helping manufacturers design for sustainability, creating products that are lighter, stronger, and more energy-efficient.

For example, an aerospace company might redesign jet engine components using topology optimization algorithms combined with material-specific AI models to achieve better fuel efficiency.

3. Enhanced Quality Control

By integrating generative AI into visual inspection systems, manufacturers are improving quality control.

For instance, in semiconductor production, AI-based defect recognition systems can now detect micro-level defects invisible to human inspectors, enhancing both precision and reliability.

4. Dynamic Supply Chain Management

Generative AI allows manufacturers to simulate supply chain scenarios, optimizing logistics and mitigating risks.

Manufacturers are using AI-powered supply chain platforms to anticipate bottlenecks and reduce delays by dynamically adjusting procurement and delivery schedules.

5. Mass Customization

Generative AI enables manufacturers to meet customer-specific demands more efficiently.

Furniture manufacturers, for example, are using parametric design software integrated with generative AI engines to design custom pieces tailored to individual spaces and preferences, all while maintaining high production volumes.

Best Practices for Implementing Generative AI

While the potential is immense, implementing generative AI requires foresight and preparation. The following best practices can help manufacturing leaders navigate this terrain:

1. Embrace Data-Driven Strategies

Generative AI technologies require not only operational datasets but also external data, such as customer feedback and market trends.

For complex applications, like designing new products or optimizing intricate production processes, the AI may need to learn from millions of data points that encompass a wide range of variables and conditions.

Unfortunately, many manufacturers lack access to high-quality, relevant data sets.

Before implementing generative AI, it's important to enhance your data collection processes and partnerships to improve and enrich your data.

2. Build Robust AI Infrastructure

Generative AI requires advanced computational infrastructure. Cloud-based solutions and edge computing are becoming critical for supporting AI operations. Manufacturers must invest in:

- **AI-optimized hardware**, like GPUs and TPUs to handle complex algorithms.
- **Edge devices** for real-time decision-making in production environments.
- **Hybrid cloud systems** to balance on-premises control with cloud scalability.

3. Address Ethical and Legal Concerns

Manufacturers must navigate an evolving regulatory landscape, including:

- **Intellectual Property (IP):** Determining ownership of AI-generated designs.
- **Bias Mitigation:** Ensuring AI systems do not unintentionally perpetuate discriminatory practices.
- **Privacy and Security:** Implementing measures to safeguard sensitive data, especially with stricter global data protection laws.

4. Cultivate AI Expertise

Upskilling the workforce is non-negotiable. As generative AI integrates into manufacturing processes, there is a growing need for cross-functional expertise. Implementing training programs for engineers, data scientists, and operators is essential to bridge the gap between AI capabilities and on-ground execution.

Conclusion

In today's rapidly evolving manufacturing landscape, the integration of advanced ERP systems has become essential for maintaining operational efficiency and competitiveness. These systems streamline processes, enhance decision-making, and provide real-time insights.

The infusion of artificial intelligence into ERP solutions further amplifies these benefits. AI-powered ERP systems are enabling manufacturers to respond swiftly to changing market demands and operational challenges.

Panorama's ERP consultants can help you stay ahead in this dynamic environment. We have decades of experience helping manufacturing leaders evaluate and adopt ERP systems that align with their operational needs and strategic goals.

Click the Button Below to Schedule Your **Free Consultation**
With an ERP Systems Expert Today!

FREE CONSULTATION

About Panorama Consulting Group

Panorama Consulting Group is an independent, niche consulting firm specializing in business transformation and ERP system implementations for mid- to large-sized private- and public-sector organizations worldwide. One-hundred percent technology agnostic and independent of vendor affiliation, Panorama offers a phased, top-down strategic alignment approach and a bottom-up tactical approach, enabling each client to achieve its unique business transformation objectives by transforming its people, processes and technology.

Panorama's Services

(click to learn more)

- ERP Selection
- ERP Implementation
- ERP Contract Negotiation
- Cloud Migration
- Digital Strategy
- AI Readiness and Enablement
- Change Management
- Business Process Management
- M&A Integration
- Project Auditing & Recovery
- Software Expert Witness

(If viewing this in Adobe Acrobat, please follow these instructions to enable external links: https://helpx.adobe.com/acrobat/using/allow-or-block-links-internet.html)

Click the Button Below to Schedule Your **Free Consultation**
With an ERP Systems Expert Today!

FREE CONSULTATION