

In recent years, manufacturers have faced intense challenges—and unprecedented opportunities—as they navigated volatile demand, broken supply chains, and changing customer expectations. Over the next decade, the most successful industrial, automotive, and high-tech manufacturers will be those that address the key forces shaping the industry.

7 key challenges for manufacturers

If you're a manufacturing executive, you've probably had better years. Inflation is at its highest rate since the 1980s, making it a challenge to control costs. Borrowing is more expensive than many executives can ever remember. And the unprecedented demand for pandemic-driven products—from medical equipment to new golf carts—has waned, as pent-up demand for events, travel, and in-person services have eaten away at consumer spending.

All of this has led to caution in the C-suite, with many CFOs and COOs being asked to reduce costs and protect profit margins. But in times of unprecedented technological change, some investments are too critical to postpone. Research from McKinsey & Company has shown that companies that invest in innovation during the toughest times emerge from the storm stronger, ready to outperform the competition.

Manufacturers who invest in tackling the following key challenges will find themselves in a stronger position to boost profits and growth, while lowering costs and increasing margins.



Managing shortages and disruptions

Quick response times are top of mind for chief supply chain officers, who continue to face supply shortages and disruptions. Today's manufacturers need connected operations and insight to stay nimble, be resilient to change, and spot new revenue-generating opportunities.

Navigating demand risk and higher operating costs

With demand volatility expected to last well into next year, companies are looking for ways to boost automation and avoid unnecessary costs. But the best decisions need accurate insights. C-suites are looking for easy-to-use dashboards, real-time alerts, built-in Al, and consistent data across HR, finance, and the supply chain.

Rising IT costs, legacy systems running on-premises, and data silos

Manufacturers can't realise the promise of Industry 4.0 with aging, disconnected, legacy technologies. They need to connect operational data—from the factory to the field—with IT systems that can process, analyse, and present the information via charts and graphics that are easy to understand.

Aging workforce and a growing need for tech-savvy workers

Manufacturers are struggling to fill open positions as they compete for workers seeking flexible schedules, higher wages, and opportunities for career advancement. They are also competing with technology companies for tech-savvy workers as they automate manufacturing. HR teams must find a way to tap new talent pools to replace workers aging out of the industry.

Adopting service-based business models and software-driven products

Services have become an important growth engine, with companies using subscription-based models to offer services and along with their products. The benefit to the customer is that they can make fewer capital investments and reduce their debt load. The benefit to the manufacturer is a stable, recurring revenue stream.

Creating a sustainable, circular supply chain

Customers, investors, and governments continue to look closely at corporate environmental practices. From minimising carbon emissions and energy consumption to safe disposal and reuse of parts, manufacturers and their suppliers must revamp their value chains to be more sustainable.

Cost and complexity of onboarding acquired companies

<u>PwC predicts</u> that mergers and acquisitions will play a key role in driving growth for manufacturing companies. But growth via acquisition comes with integration headaches—whether it's integrating finance systems across subsidiaries or integrating employees into company operations.

Our complete cloud suite for delivering exceptional client value

Oracle gives manufacturers the power to execute on all these imperatives with our <u>integrated</u> <u>suite of applications</u> and <u>Oracle Cloud Infrastructure</u> (OCI).

Our applications span every area of the business, including <u>supply chain and manufacturing</u> (SCM), <u>enterprise resource planning</u> (ERP), <u>enterprise performance management</u> (EPM), <u>human capital management</u> (HCM), <u>customer experience</u> (CX), and <u>analytics</u>. Using a common data model, these applications share one source of data, breaking down information silos and improving the accuracy of every financial, employee, customer, and product record. Manufacturers can use one application at a time or several at once; you can start with what your business needs most and tap into new capabilities as your needs evolve.

Manufacturers with construction and engineering portfolios can manage asset lifecycles and increase return on capital investments with <u>Oracle Primavera Capital Program Management</u>.

Together, these connected cloud applications give you a powerful platform to digitalise product engineering, manufacturing operations, and supply chains. The table below shows Oracle Cloud capabilities and how they address key challenges that manufacturers face.

Key imperatives for manufacturers

To address these challenges and drive growth, manufacturers must:

- Build agile, resilient supply chains
- Accelerate innovation and enhance quality with smart manufacturing
- Upskill, reskill, hire, and redefine the employee experience
- Adopt service-based business models and software-driven products
- Sustain green manufacturing
- Prepare for mergers, acquisitions, and growth

Oracle Fusion Cloud Applications					
	Build agile, resilient, and sustainable value chains	Upskill, reskill, hire, and redefine the employee experience	Accelerate innovation, enhance quality with smart manufacturing	Grow revenue with innovative services and connected products	Prepare for mergers acquisitions, and growth with one global ERP
Supply Chain Management (SCM)					
Oracle Fusion Cloud Supply Planning	X		X		
Oracle Fusion Cloud Demand Management	х		X	x	
Oracle Fusion Cloud Sales and Operations Planning	X		x	x	
Oracle Fusion Cloud Order Management	х		X	х	
Oracle Fusion Cloud Inventory Management	X		x	х	
Oracle Fusion Cloud Product Lifecycle Management	X		X	х	
Oracle Fusion Cloud Maintenance	X		x	x	
Oracle Fusion Cloud Manufacturing	X		X		
Oracle Fusion Cloud IoT Intelligent Applications	X		x	x	
Oracle Fusion Cloud Quality Management	х		X		
Oracle Intelligent Track and Trace	х		х	x	
Oracle Logistics	х		х	х	
Enterprise Resource Planning (ERP)					
Oracle Fusion Cloud Procurement	х		x		
Oracle Fusion Cloud Financials	X	X	X	Х	X
Oracle Fusion Cloud Project Management	X	x	X	x	
Enterprise Performance Management (EPM)					
Oracle Fusion Cloud EPM	х	x	X	х	X
ESG Planning & Reporting	X			х	
Human Capital Management (HCM)					
Oracle Core HR	х	x	x	х	x
Oracle Talent Management	х	x	х	x	x
Oracle Payroll		×			x
Customer Experience (CX)					
Oracle Sales & CPQ	х			х	
Oracle Marketing	X			х	
Oracle Service & Field Service	x			x	
Oracle Fusion Cloud Subscription Management				x	
Oracle Unity	х			х	
Fusion Analytics					
Fusion ERP Analytics				x	x
Fusion SCM Analytics	х		х		
Fusion HCM Analytics		х			
Fusion CX Analytics				x	
Oracle Primavera Unifier (for Construction & Engir	neering)				
Essentials	х		х		
Project Controls	х		х		
Facilities and Asset Management	x		X		

Digitize the business

Oracle Platform Services

AI/ML Redwood UX Data Content Chatbots IoT Knowledge Integrations

Oracle Gen 2 Cloud Infrastructure



Extend SaaS

Extend functionality or create new apps for unique business needs



Integration

Oracle and non-Oracle apps, robotic process automation



Analytics

Data integration, reporting visualization, data science



Security

Proactive seurity across apps, users, data, OS and infrastructure



Autonomous

Self-driving, self-securing, self-repairing, data management



Cloud Native

Modern application development, devops and deployment





Build agile, resilient, supply chains

The key to being agile is the ability to predict when things might go wrong and quickly change directions when they do. Oracle helps you move plans into action fast and minimise risk to performance targets. Set up a <u>supply chain command center</u> to help improve the quality and speed of your supply chain decision-making with predefined, cross-functional use cases that help you detect changes from digital signals, decide how to act based on that insight, and execute on your next-best action.

Oracle Cloud Supply Chain & Manufacturing (SCM) helps you procure, plan, make, ship, and deliver perfect orders every time, while lowering costs. With Oracle Procurement, you can expand and diversify your supplier base to manage risk and control total landed costs. And with Oracle Supply Chain Planning, you can connect plans across sales, operations, and finance functions so your teams can quickly adapt to changes in consumer demand and supply and handle operational issues.

You can sense, respond to, and orchestrate changes, and you can maximise order fulfillment and minimise logistics costs with our <u>connected logistics</u> solution.



TaylorMade

A leading global manufacturer of golf equipment, <u>TaylorMade</u> moved its supply chain operations to <u>Oracle Cloud Supply</u> <u>Chain & Manufacturing</u>, , gaining improved demand planning and order management capabilities. TaylorMade can now fulfill customer orders with greater precision based on accurate product availability and lead times

90%
reduction in total cost of ownership after moving supply chain functions to the cloud

Transportation and logistics organization

Real-time visibility into supply chain status and KPIs

Original equipment manufacturer

How Oracle powers manufacturing resilience

- Reduces organisation friction and improves business agility
- Enables one view of end-to-end integrated business plans
- Adapts sales and operations plans and logistics execution when there are changes in demand, supply, and resources, with near-zero latency
- Optimises supply networks and demand fulfilment



Accelerate innovation and enhance quality with smart manufacturing

Oracle's <u>smart manufacturing</u> solution helps manufacturing companies correlate quality issues to machine and environmental factors, better predict and resolve maintenance requirements, reduce downtime, and improve quality.



Litoplas hits 98% plant efficiency with smart manufacturing

Litoplas is a leading Colombian manufacturer of plastic packaging for food, health, and hygiene products. The company's legacy systems were making it difficult to plan and schedule preventative maintenance, gain a clear view of business performance, and keep machines running. With new facilities under construction in other countries, the company needed a standardized process that it could replicate at different plants. Litoplas selected Oracle Cloud SCM for supply chain and Cloud ERP for financials. The connected view of data enabled Litoplas to accurately forecast maintenance needs and plan work orders ahead of time, saving 15% in the total budget.

The company now takes 16 fewer days to produce the same number of products and is saving more than 160 hours of unplanned corrective maintenance per month. This has increased use of production lines by 5% and maximized product quality, reducing nonquality costs by 20%.



Alcar Ruote improves production efficiency with a connected factory

Alcar Ruote's manufacturing plant in Switzerland designs, produces, and distributes steel wheels for the automotive aftermarket. The company wanted to gain real-time data to respond quickly when a new car hits the market, evaluate business systems, and correct any problems. The top priority was to build more flexible and effective planning and order management processes.

Alcar Ruote implemented <u>Oracle Cloud SCM</u> and <u>Oracle Cloud ERP</u> to manage planning, procurement, manufacturing, and distribution, while also enhancing visibility across those operations. <u>Oracle IoT Intelligent Applications</u> with embedded Al capabilities allow the company to analyse sensor data, identify trends, predict failures, and take action.

How Oracle powers smart manufacturing

- Connects shop-floor data with manufacturing, maintenance, and planning business systems
- Uses built-in AI and machine learning to put information in context and provide insights that you can act on
- Predicts machine failures to get ahead of maintenance, adjust production schedules, and avoid costly downtimes
- Analyses productivity and efficiency so you can instantly respond to trends and help improve quality across the board



Upskill, reskill, hire, and redefine the employee experience

To meet a growing need for skilled, tech-savvy labour, manufacturers need strong recruiting tools. They also need technology for reskilling and easy-to-use tools for a better employee experience. With <u>Oracle Cloud Human Capital Management</u> (HCM), you can track, manage, and grow employee skills to align your workforce with your organisational goals. Comprehensive learning platforms can help workers improve their skills, while giving a lift to retention. Chatbots, Al, automation, and a mobile experience support employees regardless of location or device, providing a better employee journey from hire to retire. And you can connect your strategic workforce and financial plans using <u>Oracle Cloud Enterprise Performance Management</u> (EPM).



Steel producer attracts more talent

ArcelorMittal, one of the world's largest steel producers, moved to a cloud-based recruiting application to help fill technical jobs in highly competitive markets, such as Poland. In the eight weeks following the system rollout, the company received 1,400 job applications. Previously, the company's HR teams would receive just one or two applications per job opening in key markets.

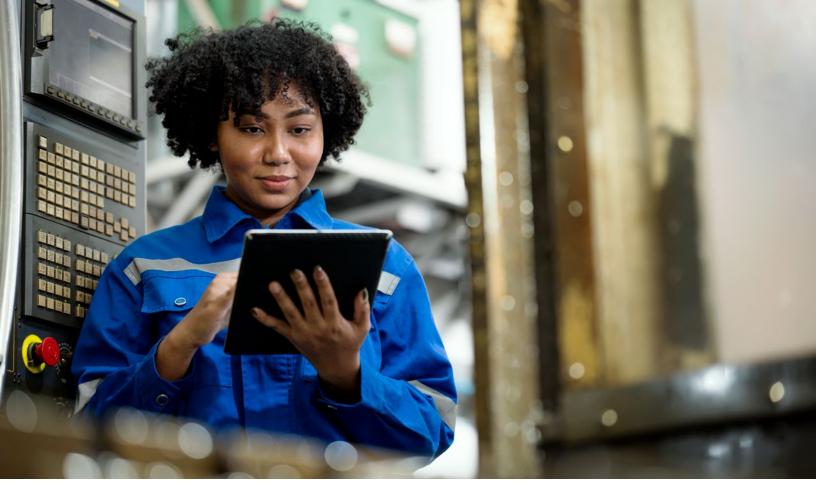
88%
reduction in payroll
processing time
Industrial manufacturer

31% increase in staff productivity Industrial manufacturer

How Oracle can help power the manufacturing workforce

- Provides accurate, real-time people data and t alent insights
- Speeds up the hiring process with easy-to-use, modern recruiting tools
- Reskills the workforce, supplementing hands-on training with structured, personalised online learning
- Deliver superior employee engagement, enabling hybrid work models and innovative workspaces





Grow revenue with innovative services and connected products

Oracle's <u>anything-as-a-service</u> solution supports omnichannel order management; online configure, price, and quote; subscription management; customer service; IoT asset monitoring; and field service. It also includes Oracle Cloud EPM, which supports scenario planning, so you can model the potential costs and revenue of new, service-based offerings.

Oracle's <u>Connected Digital Innovation</u> solution helps you speed up product development, attach sensors to new products for continuous monitoring, and upgrade those products according to your service level agreement with your customers.

Oracle's new <u>Asset-Based Service for High Tech and Manufacturing</u> enables you to continually monitor assets in the field and automatically alert customers and your service teams to potential problems. You can perform fixes remotely or onsite before there's a failure, helping you reduce downtime, improve customer experience, capture upsell opportunities, create loyal subscribers, and increase renewal rates.





Johnson Controls delivers greater value with Oracle

Johnson Controls is the world's largest provider of building technology, software, and service solutions. The company wanted to give service employees better information on the job and improve customer satisfaction. Johnson's employees can acces <u>Oracle Service</u> and <u>Oracle Field Service</u> while onsite— ensuring that all parts are accounted for, assigning the right specialist to each job, detailing the fastest route, and giving technicians real-time data to complete the work efficiently.

10–15%increased service margins
High-tech manufacturer

99%
adoption rate of new processes and systems
Building tech manufacturer

How Oracle supports new business models and revenue streams

- Provides a unified digital experience that streamlines the offer-to-order-to-billing process, drives crossselling, and improves renewal rates
- Connects products via the Internet of Things for ongoing performance insight and improvements
- Provides asset monitoring for predictive, proactive field services that reduce unplanned downtime
- Digitises and streamlines service processes to help reduce response times and cost to serve, improve margins, and increase customer satisfaction



Sustain green manufacturing programmes

Oracle helps you adopt circular economy strategies to build a more sustainable business. Oracle Cloud SCM lets you build sustainability into every part of your supply chain, while OCI runs efficiently using renewable energy sources. Oracle Cloud EPM collects; standardises; and visualises environment, social, and governance (ESG) data from across your organisation so you can monitor and report on your ESG goals.



Carbon neutral by 2030

Tetra Pak is a processing and packaging company that provides food and beverage products to millions of people around the world. One of Tetra Pak's goals is to become carbon neutral by 2030. The leading transportation management capabilities in Oracle Cloud SCM provide real-time visibility into logistics and supply chain operations, improving vehicle utilisation and route planning to reduce the company's environmental impact.

50%reduction in waste disposal
Global food manufacturer

20–30% reduction in transportation costs
Transportation and logistics provider

How Oracle powers green manufacturing

- Uncovers opportunities to use recycled materials in product design, packaging, and manufacturing
- Helps you understand the environmental impact of manufacturing and end-of-life scenarios with simulations and scenario planning
- Improves transparency at every step in your supply chain, from raw materials to final delivery
- Optimises shipment capacity and routes, minimises the deployment of empty trucks



Prepare for mergers, acquisitions, and growth with a global ERP

Mergers and acquisitions require careful planning and analysis before the deal and quick onboarding after it closes. <u>Oracle Cloud EPM</u> supports scenario modeling and financial planning to identify the best targets and analyse the potential results. Together with <u>Oracle Cloud ERP</u>, it helps improve forecast accuracy and reconcile financial transactions across your subsidiaries, so you can close and report faster. And <u>Oracle Fusion ERP Analytics</u> includes prebuilt KPIs and predictive analytics to help you uncover trends in financial performance for faster decision-making.



Driving growth via M&A

Hormel Foods has a strategy of growth via acquisition. But acquired companies come with their own legacy systems—many of them running on-premises, and most requiring a heavy lift to integrate with the parent company. Hormel decided to move all its brands to Oracle Cloud ERP, SCM, and HCM. Now the company runs all its brands on one instance of Oracle Cloud—giving them a complete view of operations and employees, and helping them onboard new companies much faster.

35% reduction in time to assimilate M&A activity High-tech company

30% improved business performance and revenue growth High-tech company

How Oracle powers M&A

- Harmonises accounting from disparate ERP and transactional systems
- Powerful, centralized accounting engine handles large transaction volumes with unmatched speed
- Helps you model and plan across finance, HR, supply chain, and sales for strategic investment decisions
- Provides insight into the impact of strategic decisions across your bottom line, balance sheet, cash flow.
- Helps you optimise capital structure by modeling different funding options



Why Oracle for manufacturing?

- Customer-centric: Committed to our customers' ongoing success
- Complete product: Modular cloud applications suite and analytics
- **Best technology:** Brand-new infrastructure, Al, machine learning, and more industry and leadership awards than any other cloud provider
- Industry specialisation: Deep capabilities across broad industry segments
- Connected digital thread: Alignment across enterprise and ecosystem
- Sustainability: Commitment to powering the entire Oracle Cloud with renewable energy by 2025
- Security: Built into every layer of the stack, from applications to hardware
- Cloud@Customer: Oracle's complete portfolio of public cloud infrastructure, fully managed cloud services, and Oracle Fusion Cloud Applications hosted at customer data centres



Next steps to move manufacturing forward

As macroeconomic uncertainties continue to raise alarms in boardrooms around the globe, the instinct might be to hunker down and cut costs until demand exceeds prepandemic levels. However, for manufacturers, the time to innovate is now—or risk falling behind the frontrunners.

Oracle provides a wide range of products and services to help you become more agile, drive continuous innovation with advanced digital platforms, and build a strong talent pool and culture.

Learn more

Explore Oracle Cloud for manufacturing

Request a demo

Connect with us

Call +44 207 5626 823 or visit oracle.com/uk/corporate/contact

Outside United Kingdom, find your local office at oracle.com/emea/corporate/contact/

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