ORACLE

Oracle for the High Tech Industry

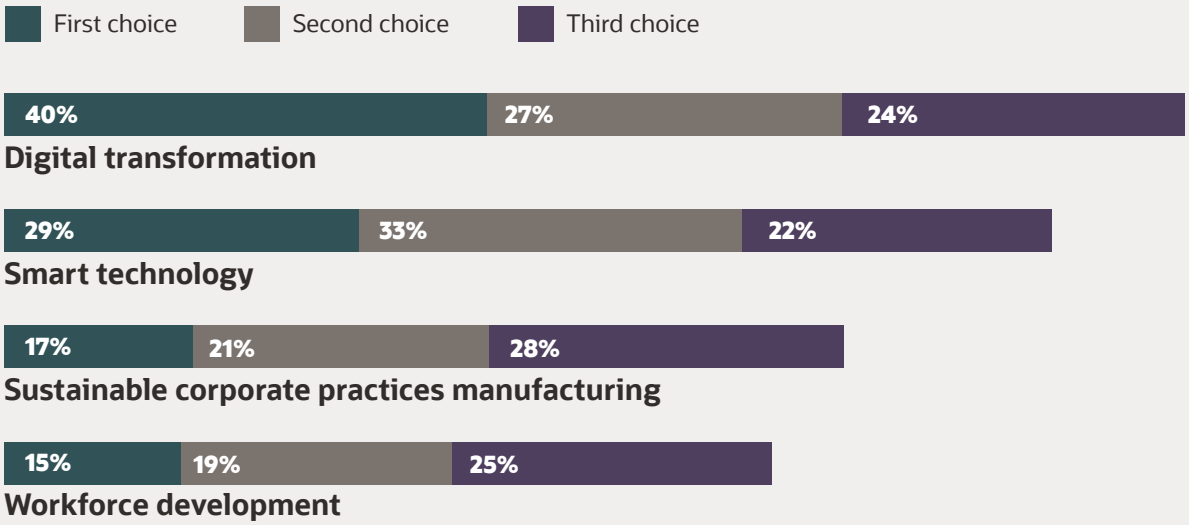
A platform for the new next in high technology

Oracle and IndustryWeek surveyed hundreds of manufacturers across the globe to understand how the pandemic has affected business, how the industry is transforming, areas that manufacturers are investing in and plan to invest in, and how investments are making a difference.

The five most influential forces shaping high technology

Over the last couple of years, high-tech manufacturers have faced intense challenges, and unprecedented opportunities, as they have navigated volatile demand, broken supply chains, and changing customer expectations. Over the next decade, the most successful manufacturers will be those that address five key forces shaping their business.

Focus for adapting to the "new next"
Question: As it relates to adapting to the "new next," please rank the following in the order of importance to your company.



Key takeaway: Four in ten respondents consider a focus on digital transformation to be most important to adapting to the "new next."

1 Volatile demand and supply chain disruption

The wild fluctuations in demand triggered by the pandemic were a once-in-a-lifetime event for most manufacturers. Supply couldn't meet consumer demand, resulting in higher prices. Manufacturers encountered long lead times, higher transportation costs, and severe labor shortages. In a survey last fall of nearly 300 global manufacturers by Oracle and IndustryWeek, 29% reported that creating a more robust, resilient supply chain was a necessity going forward.

Market volatility and supply chain challenges expected to continue and some industry segments are already experiencing major demand contraction creating new kind of demand disruption. Additionally, newly enacted global trade restrictions are forcing companies to rethink their global supply chain and take into account localization constraints.

2 Greater focus on sustainability

As customers, investors, and governments deepen their scrutiny of corporate environmental practices, sustainability has become an indispensable strategy for manufacturers seeking business investment and growth.

From minimizing carbon emissions and energy consumption to using smarter packaging and safe disposal, manufacturers and their suppliers are revamping value-chain processes to support sustainability. They're also embracing new business models for long-term sustainability, such as moving from a "make and forget" mindset to a "make to last" one where products are supplemented with maintenance services that maximize their lifespan.

3 Increasing adoption of smart, data-driven manufacturing

The pandemic tested the resilience of manufacturers like never before. Companies had to adapt faster and boost manufacturing productivity to new levels. To meet this challenge, manufacturers are investing in advanced technologies. The IndustryWeek survey found that 30% are investing in digital transformation and 28% in smart technologies. For example, by deploying AI-powered "digital twins"—digital representations of products, processes, and facilities—manufacturers can simulate the effects of supply and demand variability on performance, quickly and cost-effectively.

Successful manufacturers are also pursuing digitalization initiatives that, together with digital twins and a "digital thread" (a communication framework for data across the product lifecycle), can connect all business processes and track asset availability and product quality in real time using Industry 4.0 technologies, such as the IoT.

4 New opportunities for connected products and services

For a growing number of manufacturers, services have become an important growth engine. Manufacturers are incorporating services alongside product offerings and implementing subscription-based models. According to a 2022 M&A report by PwC, mergers and acquisitions will play a key role for manufacturers as they realign their products and services to fill gaps and create value. Connected products, enabled by front- and back-office integration, will become central to modern manufacturing success, driving revenue growth, sustainable products and enduring relationships with customers.

5 The changing work model and labor shortages

Manufacturers responded to the pandemic by deploying a hybrid model in which nonproduction processes are managed remotely and in-person production processes are redesigned for social distancing. This shift is almost certainly here to stay. Hybrid and flexible work models will continue to evolve to attract and retain workers, according to Deloitte's "2022 Manufacturing Industry Outlook."

Meanwhile, the industry faces an aging workforce and a scarcity of skilled workers. The transition to Industry 4.0 and digital manufacturing will require only stronger technology skills. Even more worrisome for manufacturers is the lack of interest in manufacturing jobs by the new generation of workers. Strategic workforce planning and a focus on improving the employee experience are paramount to attracting top talent.

Key imperatives for high tech

To address the forces shaping the industry and to drive continuous innovation and growth technology businesses must execute the following key imperatives:

- Build resilient and sustainable supply chains while lowering costs
- Grow revenue with new digital buying experiences and service-based business models
- Accelerate innovation, enhance quality and productivity with smart manufacturing
- Successfully transform the business to a newer, better version of itself

Our platform for smart manufacturing

Oracle gives high tech manufacturers the power to bring innovations to market faster, make their supply chains more resilient, and redefine the customer experience with its integrated suite of applications and Oracle Cloud Infrastructure (OCI).

Our applications span every area of the business, including enterprise resource planning (ERP), enterprise performance management (EPM), human capital management (HCM), customer experience (CX), supply chain management (SCM), and manufacturing. They are fully composable, so manufacturers can use one application at a time or several at once from a single infrastructure. In this way, they leverage what their business needs most and tap into new capabilities as those needs change.

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

Oracle Fusion Cloud Applications				
	Create resilient and sustainable supply chains while lowering costs	Grow revenue with new digital buying experiences and service-based business models	Accelerate innovation, enhance quality and productivity with smart manufacturing	Successfully transform the business to a newer, better version of itself
Oracle Cloud ERP				
Oracle Fusion Cloud Procurement	x	x	x	
Oracle Fusion Cloud Financials	x	x	x	x
Oracle Fusion Cloud Project Management	x	x	x	x
Oracle Fusion Cloud Subscription Management		x		
Oracle Cloud EPM				
Oracle Fusion Cloud EPM	x	x	x	x
ESG Planning & Reporting	x	x		
Oracle Cloud SCM				
Oracle Fusion Cloud Supply Planning	x		x	x
Oracle Fusion Cloud Demand Management	x		x	x
Oracle Fusion Cloud Sales and Operations Planning	x		x	
Oracle Fusion Cloud Order Management	x	x	x	
Oracle Fusion Cloud Inventory Management	x	x	x	
Oracle Logistics	x	x	x	
Oracle Fusion Cloud Product Lifecycle Management	x	x	x	
Oracle Fusion Cloud Maintenance		x	x	
Oracle Fusion Cloud Manufacturing			x	
Oracle Fusion Cloud IoT Intelligent Applications	x	x	x	x
Oracle Fusion Cloud Quality Management			x	
Oracle Cloud CX				
Oracle Sales Cloud	x	x		
Oracle Marketing Cloud	x	x		
Oracle Service Cloud	x	x		
Oracle Configure, Price, Quote		x	x	
Oracle Cloud HCM				
Oracle Core HR	x	x	x	x
Oracle Talent Management	x	x	x	x
Oracle Payroll				x

Oracle Analytics Cloud, Oracle Integration Cloud, Oracle Digital Assistant Cloud, Oracle Mobile Hub Cloud
Oracle APEX, Oracle Visual Builder

Oracle Cloud Infrastructure

Build resilient and sustainable supply chains while lowering costs

Oracle Cloud Supply Chain and Manufacturing enable manufacturers to procure, plan, and make, and ship with resilience while lowering costs. With Oracle Procurement, manufacturers can expand and diversify their supplier base to manage risk and rising total landed costs. With Oracle Supply Chain Planning, manufacturers can connect planning across sales, operations, and finance functions so teams can adapt to changes in consumer demand, supply, and operational issues. They can move plans into action quickly and minimize the risk of missing performance targets.

Manufacturers can also take advantage of Oracle SCM's connected data for analytics and intelligence in end- to-end operations management to improve the quality and speed of supply chain decision making.

By incorporating the concept of a supply chain command center, powered by Oracle SCM, they can make sure decisions are derived from a common harmonized data layer, apply pre-defined use cases and respond to any business condition, and get recommended network actions focused on the best possible outcome to execute on helping them optimize logistics planning and execution.

Manufacturers can deliver on their sustainability efforts by implementing systems that reduce their carbon footprint across the value chain—from using ethically sourced materials, to designing environmentally friendly products, and to manufacturing and transporting products in a sustainable way.

By integrating advanced technologies such as artificial intelligence (AI), machine learning (ML), the Internet of Things (IoT), and prescriptive analytics, manufacturers can detect unexpected events affecting the company's future performance and quickly adapt their plans and operations to address these changes.

Juniper thrives with Oracle Supply Chain Planning
Juniper Networks makes high-performance networking products and services for large enterprises, service providers, cloud providers, and state and local governments, With Oracle Cloud Supply Chain Planning, Juniper gains significant improvements in inventory management and customer service as well as improved assembly and test operations, which helped balance order management and production delivery.

90%

reduction in total cost of ownership after moving IT for supply chain functions to the cloud

Transportation and logistics organization

15%

increased sustainability focus reduces water consumption

Global food manufacturer

How Oracle powers manufacturing resilience

- Reduces organization friction and improves business agility by enabling one view of the end-to-end production and maintenance plan
- Adapts sales and operations plans and logistics execution when there are changes in demand, supply, and resources
- Optimizes supply networks and demand fulfillment

Grow revenue with new digital buying experiences and service-based business models

By investing in new market opportunities, differentiated business models—such as service oriented or "as-a-service"—and strategic M&As, manufacturers can accelerate revenue, drive immediate growth, and thrive for the long haul.

Deliver anything as a service

To accelerate the transition to service-centric business models (including subscription-based approaches), device and hardware manufacturers need an operating platform that provides a full range of product-as-a-service capabilities, including new pricing and financial models, product and field services, and sophisticated output-based and recurring billing systems.

With Oracle Anything As A Service (XaaS), manufacturers can integrate contract setup and subscriptions with streamlined digital buying processes and then optimize fulfillment and delivery of products, projects, and related services across channels and systems. Oracle XaaS leverages advanced IoT networks to calculate usage across the installation base, so companies can more easily create output-based subscription billing systems. Integrated financials let manufacturers properly allocate and recognize revenue while built-in service logistics capabilities enable them to manage service partners, schedule and complete service, track service parts, return logistics, and disposition.

In addition, Oracle Unity customer data platform (CDP) consolidates, standardizes, and enriches siloed customer data into a single repository, giving the entire enterprise a 360-degree view of the customer. With Unity, marketing, sales, and service teams can leverage pre-built data models or build their own to deliver personalized experiences at scale including behavior-based segmentation and next best offer recommendations to grow revenue.

Prepare for mergers, acquisitions, and growth

Manufacturers need to prepare for M&A-driven growth by simplifying and modernizing their IT applications and infrastructure. Standardizing on a global ERP and moving IT applications and infrastructure to the cloud will help reduce the cost, time, and labor required to merge businesses and integrate acquisitions.

Oracle Cloud ERP gives manufacturers the opportunity to standardize their M&A onboarding and business processes on a single system so they can strategically build on opportunities and bring new acquisitions on board faster.

Johnson Controls

Johnson Controls delivers greater value with Oracle
Johnson Controls transforms the environments where people live, work, learn, and play. The company's success depends on a differentiated service experience—a formidable challenge given the 5 million service requests they handle annually. To meet growing demand, Johnson Controls selected Oracle Service and Oracle Field Service for a low total cost of ownership and improved efficiency, effectiveness, and reduced risk.

35%

reduction in time to assimilate M&A activity

High-tech company

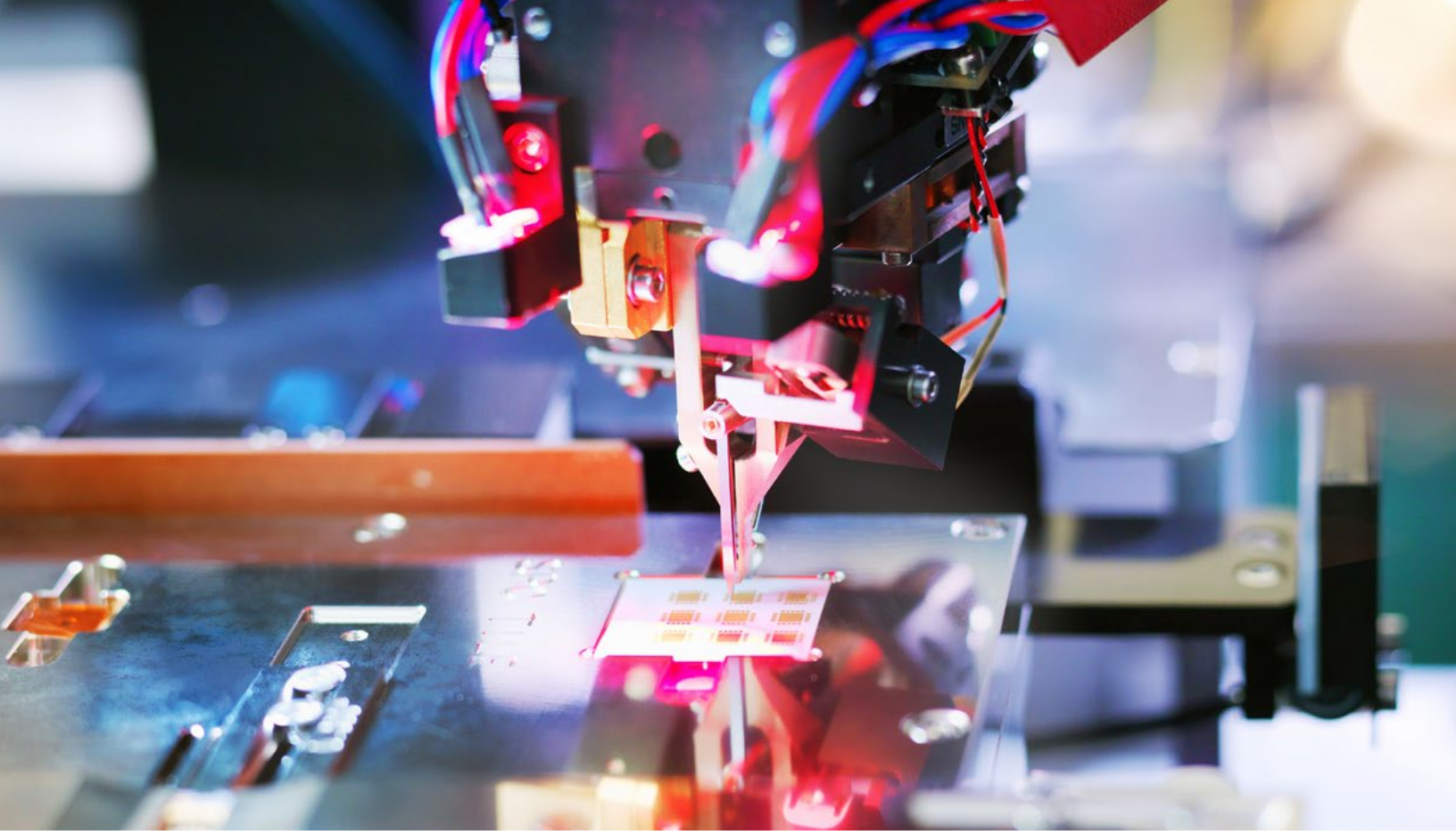
30%

improved business performance and revenue growth

High-tech company

Key differentiators: why Oracle for high tech

- Highly secure cloud for manufacturers to protect their valuable data
- Cloud@Customer: Oracle's complete portfolio of public cloud infrastructure, fully managed cloud services, and Oracle Fusion SaaS applications hosted at customer data centers
- Broadest and deepest product portfolio, from hardware and cloud infrastructure to unified enterprise applications
- Unified data model and a data lakehouse for Manufacturing that aggregates IT/OT data
- Committed to powering its cloud entirely with renewable energy by 2025



Accelerate innovation while elevating quality and productivity with smart manufacturing

Leading global manufacturers are adapting to a digital-first world. As they face pressure to introduce new products and meet new customer demands, they're also trying to maintain their profit margins. To achieve operational excellence and move toward Industry 4.0, they'll need to invest in smart manufacturing.

Oracle's smart manufacturing solution provides a comprehensive set of tools to support multiple manufacturing modes—discrete, process, and project-based manufacturing. Oracle's end-to-end, scalable solution includes a combination of purpose-built cloud applications, advanced digital technologies such as artificial intelligence and IoT, and a full-stack technology ecosystem to meet the growing needs of manufacturers. Companies can collect operational data in real time, rapidly extract and share insights from the data, and make holistic and collaborative decisions faster.

With our connected digital innovation solution you get a digital thread to track the complete lifecycle of products from idea through release, in-field use and service. This closed-loop innovation cycle integrates quality data, user feedback, IoT-enabled product usage analysis, and collaboration across the value chain. The result is a reduction in the time it takes to get the right products and services to market while improving quality and customer satisfaction.

Cohu

Cohu moves to Oracle Cloud to boost efficiency, scale quickly
Cohu offers a broad portfolio of equipment and services for back-end semiconductor manufacturing. After rapid growth via acquisition led to years of integrating a range of on-premises legacy software, Cohu moved to Oracle Cloud ERP and Oracle Cloud SCM. As part of its quest to become One Cohu, Oracle helped the company standardize on common cloud-based systems, processes, and shared services in order to increase efficiency, scale quickly, and ultimately move toward a unified identity.

50%

reduction in end-to-end lead times for critical components

Utility company

2800

production locations connected via a single solution

Global logistics company

How Oracle powers smart manufacturing

- Enhances asset availability, throughput, and quality with real-time monitoring of assets and production processes equipped with IoT
- Enables businesses to manage discrete, process, and project manufacturing on a single platform
- Connects design, manufacturing, and service processes with a digital thread
- Enables deeper insights and better decisions with a centralized repository for IT and OT data and analytics powered by AI/ML algorithms

Successfully transform the business to a newer, better version of itself

Leaders in high-tech recognize that adopting an as-a-service business model is not a matter of if, but when. The real struggle is the organizational change required to adopt new financial models, new sustainable supply chains, new go-to-market strategies, and new services—as well as navigating staffing and workforce development challenges.

Start by unifying financial and operational planning with Oracle's Integrated Business Planning and Execution (IBPX) solution to deliver a single view of the end-to-end business plan and accelerate decision-making. Transform plans into execution and track results using IoT, AI and prescriptive analytics. IBPX also provides "What-if?" scenario analysis and evaluates the alternatives to maintain or improve upon business targets.

With Oracle Cloud HCM, manufacturing companies around the world are finding new ways to optimize their modern workforce, taking advantage of automation and AI-guided processes to support employees regardless of location or device.

Manufacturers can also track, manage, and grow employee skills to ensure the workforce is ready for what's next. Comprehensive learning platforms can help workers climb learning curves faster while giving a lift to employee engagement and retention.

Fujitsu standardizes people management with Oracle Cloud HCM
Fujitsu is an enterprise provider of information and communications technology equipment and services with over 126,000 employees. Due to the global nature of its business, Fujitsu was operating with a patchwork of human resource IT systems at its multiple locations across Europe, Asia, and North America. Fujitsu chose Oracle Human Capital Management (HCM) over competing solutions because it offered a single platform to input and share employee information and HR data across the organization, dramatically reducing its IT footprint while improving efficiency.

88%

reduction in payroll processing time

Industrial manufacturer

31%

increase in staff productivity using self-service applications

Industrial manufacturer

How Oracle powers digital transformation in high tech

- Empowers HR and the executive leadership team with real-time people data and talent insights
- Accelerates the hiring process with easy-to-use, modern recruiting tools, reskills the workforce, supplementing hands-on training with structured, personalized online learning
- Delivers superior employee engagement with hybrid work models and innovative workspaces

Next steps to move high tech forward

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

Many device and hardware manufacturers have already started—and the vast majority are reaping the rewards. Of the roughly 300 large manufacturing leaders participating in the IndustryWeek survey, 79% were in the advanced stage of digital manufacturing initiatives, 69% had advanced use of smart technologies, and 78% had advanced sustainability initiatives. All of them were reporting positive ROI.

A survey conducted by LNS Research also showed the financial improvements reported by leaders in industrial transformation, including concrete gains in revenue (10%), cost of goods sold (10%), and operating margins (5%).

IX Leaders are	**72%**	**more likely to**	**Increase**	**Revenue**	**by**	**10%**	**as a result of their IX program**
	57%		**Reduce**	**COGS**		**10%**	
	43%		**Increase**	**Operating Margin**		**5%**	

Oracle provides the widest range of products and services to help manufacturers become more agile, driving continuous innovation with advanced digital platforms, and building a strong talent pool and culture.

Learn more

Explore Oracle for High Tech

Request a demo

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