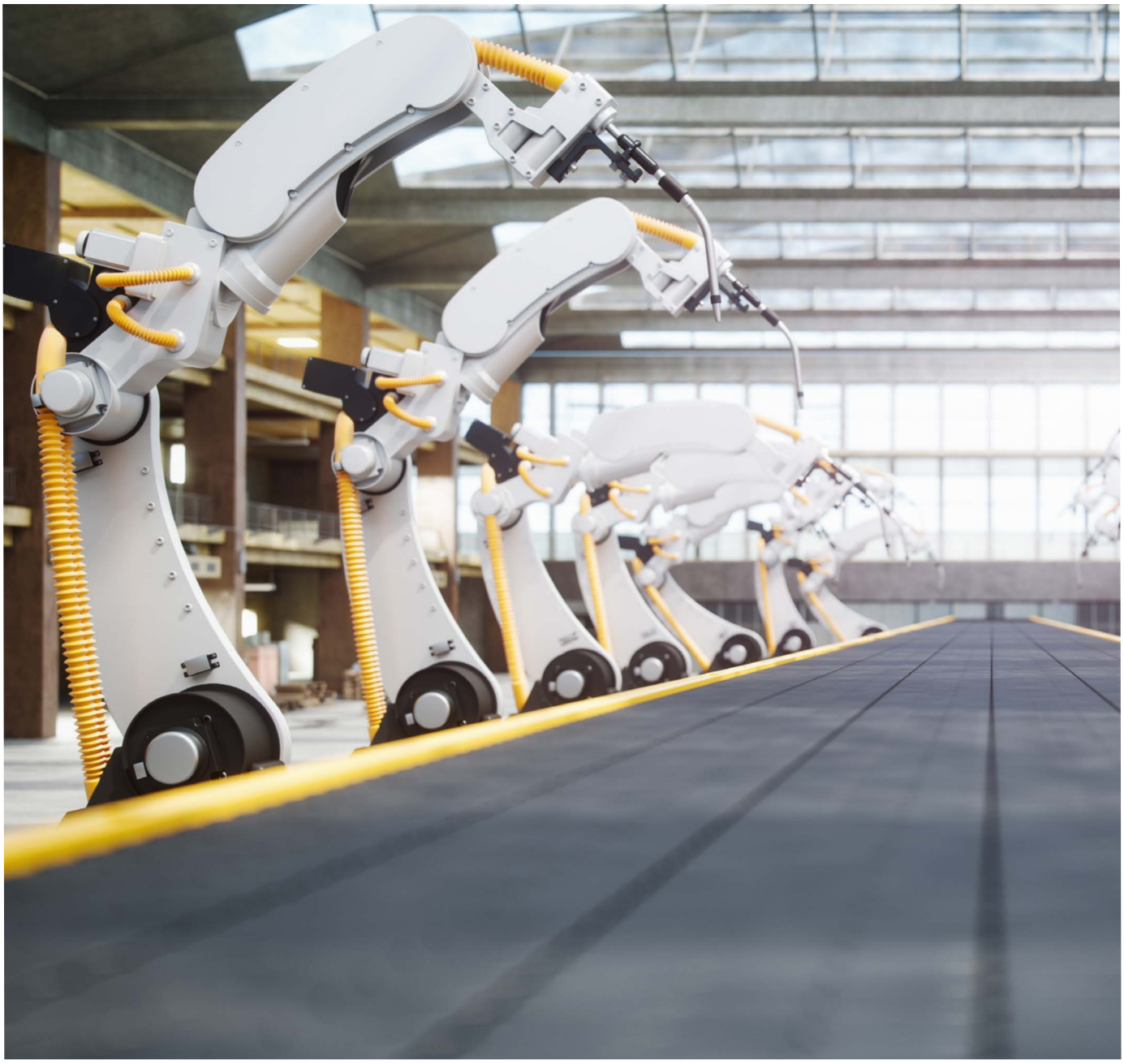
IFS Cloud: The Only Complete Asset Lifecycle Management Solution for Manufacturing



Make Today's Production Assets Tomorrow's Competitive Advantage

IFS Cloud: The only complete Asset Lifecycle Management solution purpose-built for manufacturing excellence.

Why Manufacturing Asset Management Has Reached a Critical Inflection Point

Manufacturing operations depend on the reliability and uptime of production assets - CNC machines, industrial robots, process reactors, production lines, automation systems, and critical utilities. Yet most manufacturers face three converging challenges that threaten operational performance, quality, and competitiveness:

Aging Production Infrastructure Operating Beyond Design Life

Production equipment designed for 20-25 years now routinely operates 30, 35, even 40 years beyond intended lifespan. This isn't just an engineering concern–it's a board-level risk manifesting daily through:

- Unplanned downtime increasing 40-80% as equipment degrades
- Mean time between failures (MTBF) declining despite stable utilization
- Reactive maintenance consuming resources that should drive reliability improvement
- Rising maintenance costs that outpace production output growth
- Safety incidents and quality issues traced to equipment in compromised condition

Fragmented Asset Data Across Engineering, Operations, and Maintenance

Asset information exists across disconnected systems–product lifecycle management (PLM) for design, manufacturing execution systems (MES) for production, computerized maintenance management systems (CMMS) for work orders, quality management systems (QMS) for inspections.

The result: engineering changes don't sync with operations, maintenance works from outdated drawings, quality inspections reference specifications that no longer match installed equipment.

Calendar-Based Maintenance Programs That Ignore Actual Equipment Condition

Time-based preventive maintenance schedules assume equipment degrades predictably. In practice, two identical machines degrade at vastly different rates depending on operating severity, maintenance history, and environmental conditions. Reactive work progressively consumes capacity, creating a firefighting cycle that systematically undermines reliability.

Beyond Maintenance

Why Manufacturing Needs Complete Asset Lifecycle Management

Traditional enterprise asset management (EAM) emerged as a maintenance-centric approach–managing work orders, spare parts, and preventive schedules. Asset Lifecycle Management represents a fundamental evolution: optimizing asset decisions across the complete lifecycle from concept to renewal.

The Asset Lifecycle Management Difference

Asset Lifecycle Management (ALM) for manufacturing integrates five critical capabilities within a unified operational model:

1. Asset Investment Planning – Risk-based capital allocation across production lines, utilities, and critical equipment. Model total lifecycle costs including maintenance trajectories, energy consumption, quality impact, and production constraints. Prioritize renewals and modernization programs using comprehensive operational and financial analysis.

2. Capital Project Management – Execute plant expansions, line upgrades, and equipment modernization with full cost control, progress tracking, and governed handover. Ensure digital continuity from engineering design through commissioning to operations–maintaining as-designed, as-built, and as-maintained synchronization.

3. Asset Operations & Maintenance – Transition from calendar-based to condition-based maintenance using real-time equipment health data, AI-driven anomaly detection, and predictive analytics. Optimize maintenance timing and resource allocation aligned with production windows, equipment criticality, and actual degradation patterns.

4. Asset Performance Management – Monitor equipment condition through integrated sensor data, inspection findings, and operational performance. Enable early detection of degradation, reliability-centered maintenance (RCM), and continuous optimization of maintenance strategies based on actual failure modes and equipment behavior.

5. Workforce & Supply Chain Optimization – Coordinate maintenance execution with production schedules using AI-powered planning and scheduling. Ensure optimal spare parts availability, efficient resource allocation, and seamless coordination between internal technicians, contractors, and operations team

The IFS Cloud Advantage: Purpose-Built ALM for Manufacturing Excellence

IFS Cloud delivers the manufacturing industry's only complete Asset Lifecycle Management solution–unifying investment planning, project execution, operations, maintenance, and asset performance management within a single platform designed specifically for manufacturing operations.

Asset Investment Planning

Make data-driven capital allocation decisions that maximize asset performance and business value:

- Model total lifecycle economics: maintenance trajectories + energy costs + quality impact + production constraints + safety risk
- Prioritize equipment renewals, line modernizations, and automation upgrades using risk-adjusted optimization
- Perform "what-if" scenario planning evaluating different capital allocation strategies
- Align investment decisions with operational realities through direct integration with asset health, maintenance costs, and performance data
- **Manufacturing application:** Optimize timing of production line upgrades, bottleneck equipment replacements, and automation modernization programs

Asset Planning and Capital Project Management

Plan, design, and deliver complex manufacturing projects–production line installations, automation upgrades, facility expansions–with full visibility and control:

- Integrate seamlessly with PLM systems (Siemens Teamcenter, Dassault, PTC Windchill) ensuring as-designed specifications flow directly into project execution
- Manage end-to-end realization from concept through specifications to complete registered assets ready for production
- Control costs, track progress, and manage procurement across engineering, procurement, and construction (EPC) phases
- Execute digital handover ensuring as-built documentation synchronizes with as-maintained operational records
- Manufacturing context: Manage equipment qualification (IQ/OQ/PQ), commissioning protocols, and production readiness verification

Unified Asset Data Model with Manufacturing Integration

Establish single source of truth for all production equipment, tooling, automation, and utilities:

- Govern equipment hierarchies spanning production lines, work centers, machines, and components with unlimited depth
- Maintain configuration control across as-designed (PLM), as-built (commissioning), and as-maintained (operations) states
- Integrate natively with MES platforms (Siemens Opcenter, Rockwell FactoryTalk, AVEVA) ensuring production context informs maintenance decisions
- Connect SCADA, distributed control systems (DCS), and programmable logic controllers (PLCs) for real-time operational data
- Link with QMS and laboratory information management systems (LIMS) connecting equipment condition to product quality
- **Manufacturing context:** Track calibration status, tooling lifecycles, fixture management, and measurement device traceability

Condition-Based and Predictive Maintenance

Transition from reactive firefighting to optimized, risk-based maintenance strategies:

- Collect real-time condition data from sensors (vibration, thermal, acoustic, oil analysis) with automated anomaly detection
- Assess equipment health combining condition monitoring, inspection findings, work order history, and operational performance

- Predict failure probability and remaining useful life (RUL) using AI-driven analytics and reliability modeling
- Trigger maintenance interventions based on actual equipment degradation rather than calendar schedules
- Implement reliability-centered maintenance (RCM) and failure modes and effects analysis (FMECA) systematically
- **Manufacturing context:** Optimize maintenance timing aligned with production schedules, takt times, batch cycles, and planned changeovers

AI-Powered Maintenance Planning and Scheduling

Maximize maintenance effectiveness while minimizing production disruption:

- Optimize work scheduling considering equipment criticality, production windows, resource availability, and material constraints
- Prioritize interventions using risk-based assessment combining failure probability and production impact
- Coordinate internal technicians, contractors, and operations teams with intelligent resource allocation
- Reduce planned downtime windows for major outages, shutdowns, and line overhauls
- **Manufacturing context:** Align maintenance with production planning to protect bottleneck assets, coordinate with MES schedules, and optimize OEE

Integrated Spare Parts and Inventory Management

Ensure critical components available when needed without excess working capital:

- Forecast parts demand using predictive maintenance insights and failure probability modeling
- Optimize inventory levels balancing stockout risk against carrying costs
- Manage procurement across internal stores, vendor consignment, and just-in-time delivery
- Track warranty status, equipment life, and replacement part availability
- **Manufacturing context:** Manage tooling inventories (molds, dies, fixtures), critical spares for production lines, and consumables synchronized with usage patterns

Mobile Work Execution and Connected Worker

Empower maintenance technicians and operators with field-ready digital tools:

- Execute work efficiently with mobile access to equipment history, procedures, and technical documentation
- Capture condition observations, inspection findings, and corrective actions in real time
- Document work completion with digital evidence (photos, signatures, measurements, test results)
- Enable offline operation for environments with limited connectivity
- **Manufacturing context:** Support operator rounds, shift handovers, autonomous maintenance (TPM), and equipment care routines integrated with reliability programs

Document and Drawing Management

Maintain engineering documentation synchronized with operational reality:

- Control engineering drawings, technical specifications, and equipment documentation with version management
- Link documents directly to specific equipment ensuring field teams access current information
- Manage modification workflows connecting engineering changes to operations and maintenance updates
- Support collaboration across internal engineering, equipment OEMs, and contractors
- **Manufacturing application:** Synchronize P&IDs, electrical schematics, automation programs, and mechanical drawings with actual installed configurations

Health, Safety, and Environmental (HSE) Management

Embed safety and compliance into every maintenance and operational activity:

- Enforce permit-to-work, lockout/tagout (LOTO), and confined space protocols systematically
- Manage safety inspections, equipment certifications, and regulatory compliance requirements
- Track incidents, near misses, and corrective actions linked to specific equipment
- Ensure all maintenance work completes with proper safety controls and digital evidence

- **Manufacturing application:** Manage machine guarding, robotic safety zones, pressure equipment certifications, and process safety management (PSM) requirements

B2B Contracting and Subcontractor Management

Coordinate maintenance and project work across internal teams and external contractors:

- Manage contractor qualifications, certifications, and performance tracking
- Award work, share documents, and track progress through contractor portal
- Coordinate schedules, resource allocation, and quality standards
- Manage service level agreements (SLAs) and contractor performance metrics
- **Manufacturing application:** Coordinate OEM maintenance partnerships, specialized contractor services, and capital project construction teams

2D/3D Visualization and Digital Facility Modeling

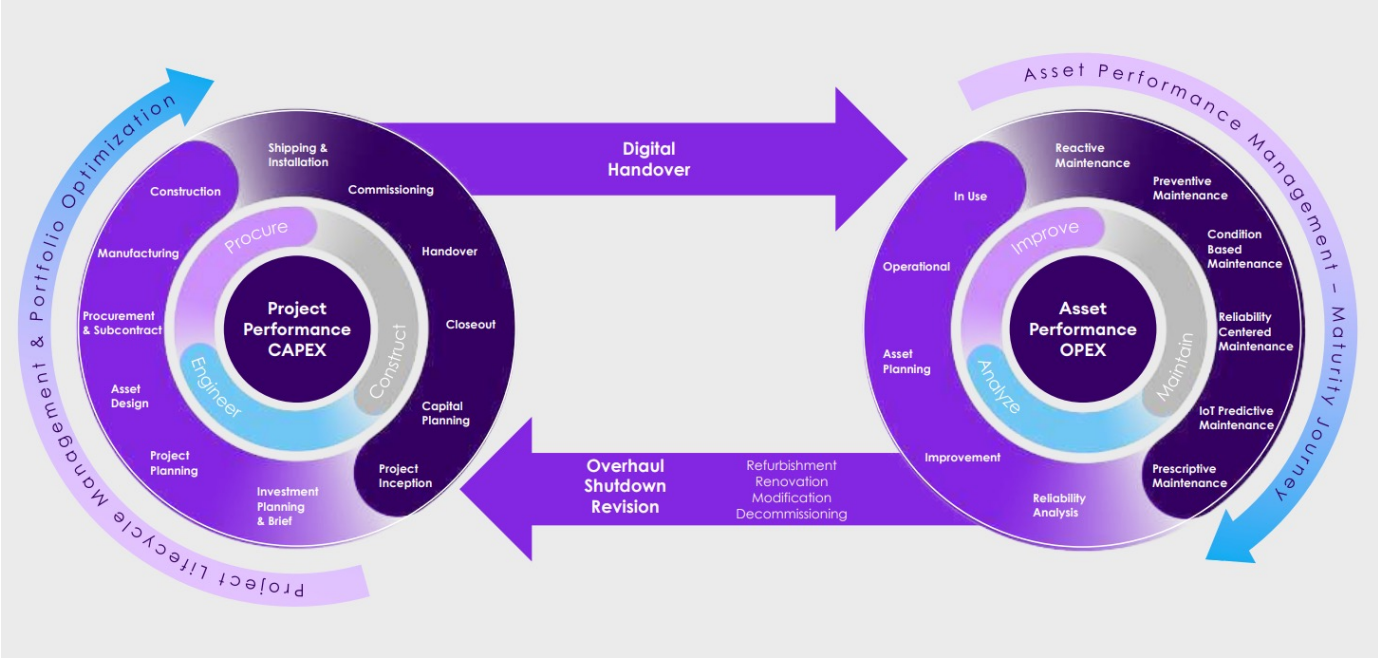
Visualize, manage, and optimize manufacturing environments using integrated digital representations of facilities, production assets, and operational layouts:

- Enable 2D and 3D visualization of production facilities, equipment configurations, and line layouts
- Support digital facility models (including BIM where applicable) to maintain alignment between design, construction, and operations
- Provide contextual visibility of assets within production lines, work cells, and plant environments
- Improve maintenance planning and execution through spatial awareness of equipment, dependencies, and access constraints
- Manufacturing application: Visualize production line layouts, equipment positioning, and facility infrastructure to enhance planning, maintenance efficiency, and operational decision-making

End-of-Life and Asset Renewal Management

Plan and execute equipment decommissioning, refurbishment, and replacement systematically:

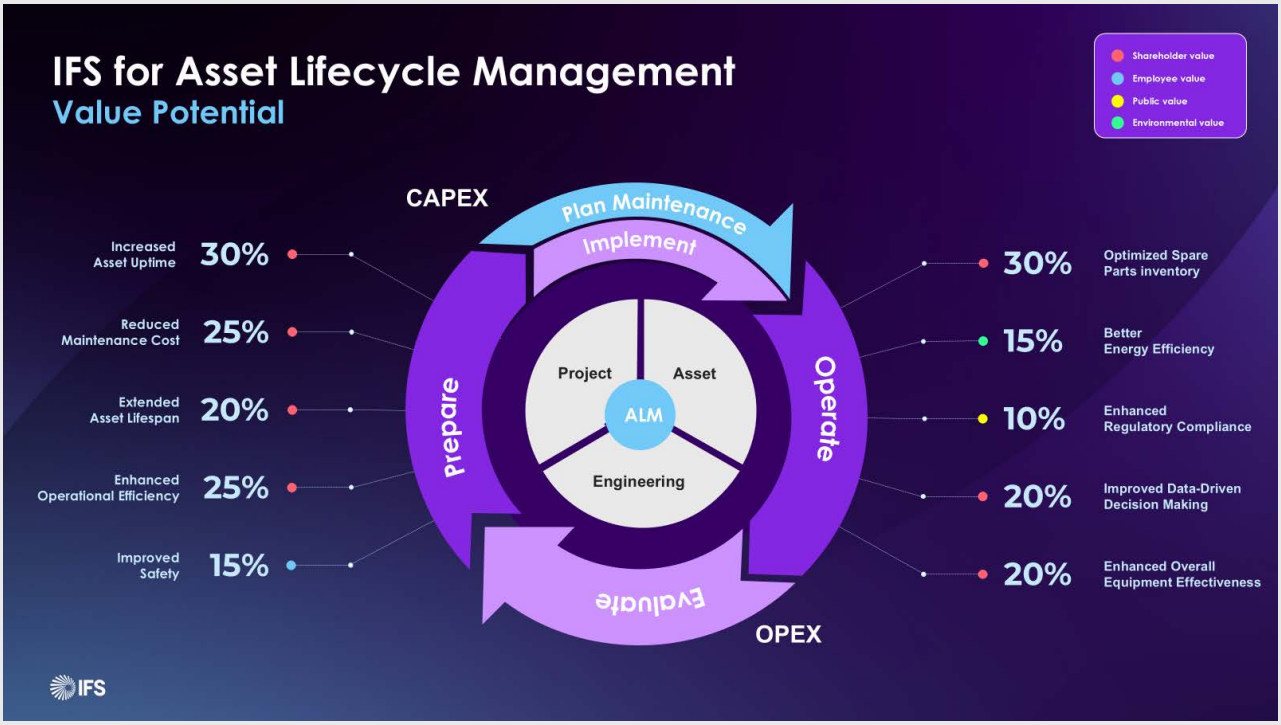
- Manage asset retirement including environmental compliance, regulatory requirements, and sustainability objectives
- Coordinate refurbishment programs extending equipment life while controlling costs
- Execute equipment replacements maintaining production continuity
- Re-purpose existing assets for alternative production applications
- **Manufacturing application:** Plan line reconfigurations, equipment moves, tooling replacement programs, and obsolete equipment retirement



The IFS Cloud Advantage: Purpose-Built ALM for Manufacturing Excellence

Manufacturers implementing IFS Cloud's complete Asset Lifecycle Management capabilities can expect measurable improvements across operational and financial dimensions. These outcomes emerge because unified ALM optimizes asset decisions across the complete lifecycle–not just isolated maintenance activities.

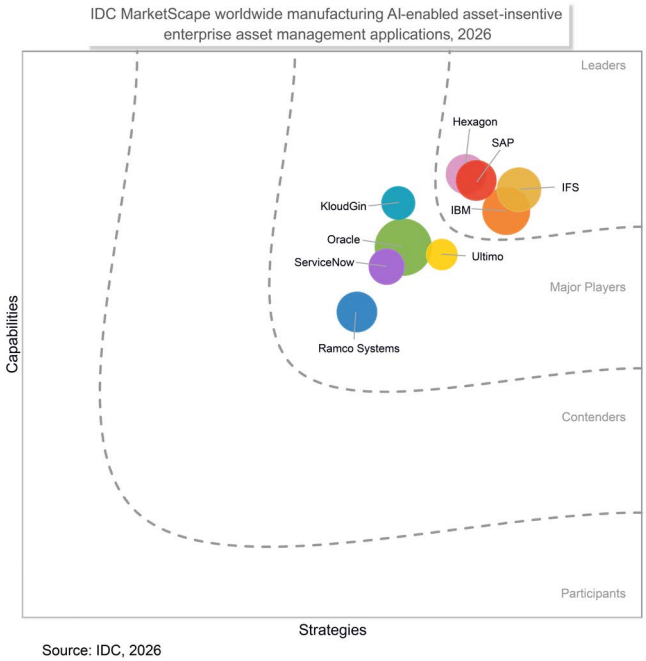
Manufacturers using IFS Cloud capabilities to manage their assets can expect benefits as great as...



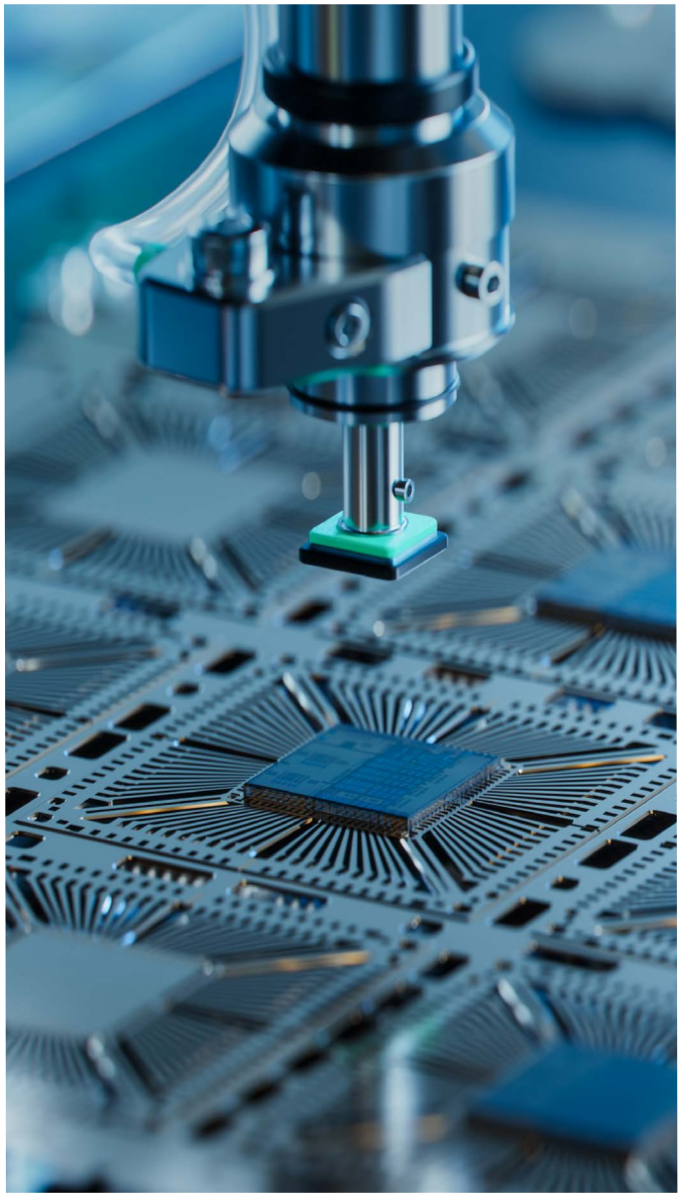
Why Leading Manufacturers Choose IFS for Asset Lifecycle Management

IFS's position as the manufacturing industry's ALM leader reflects both customer success and analyst recognition. Manufacturing organizations choose IFS because we deliver the only complete ALM solution specifically designed for complex production environments.

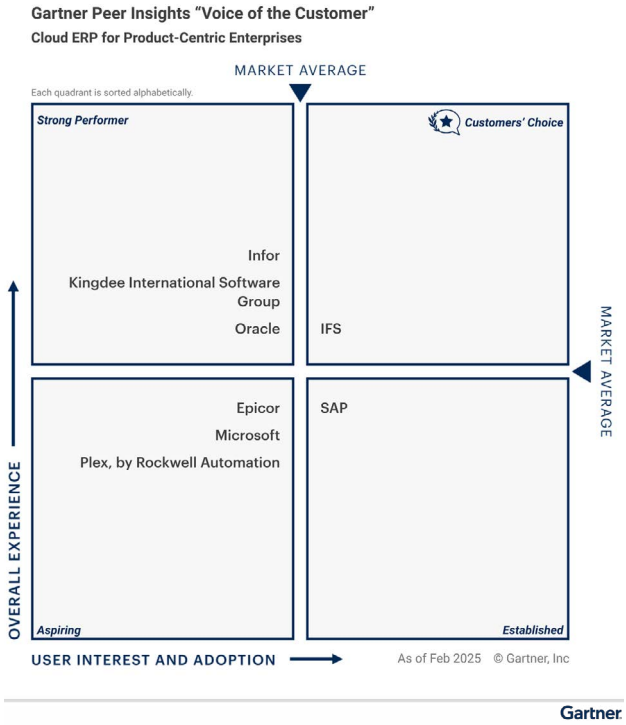
A Leader in the 2026 IDC MarketScape for Worldwide Manufacturing AI-Enabled Asset-Intensive Enterprise Asset Management Applications Vendor Assessment.

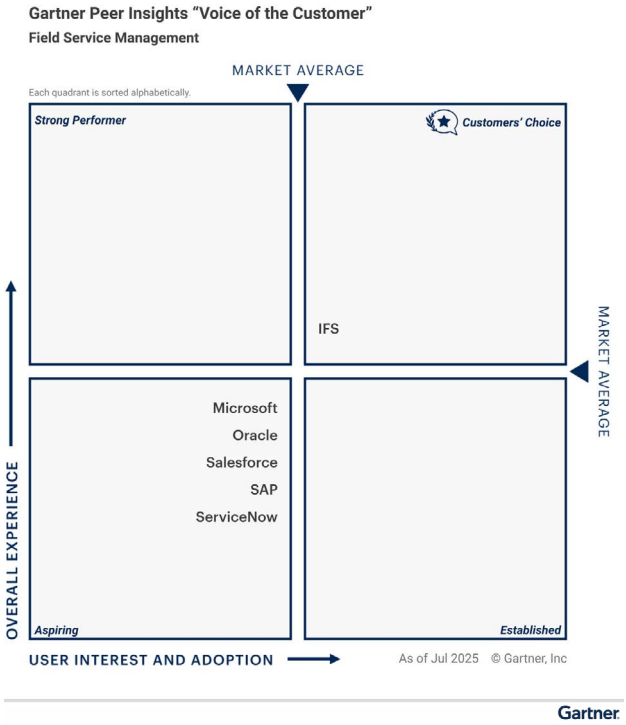


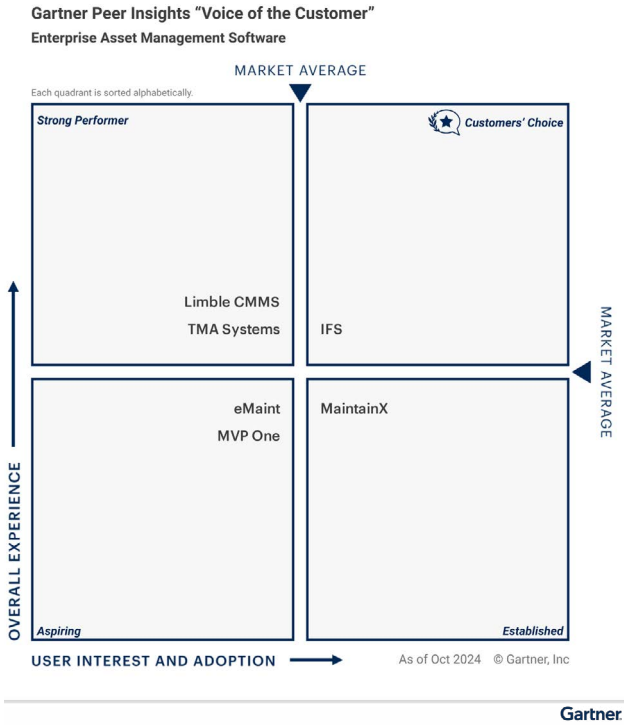
Source: IDC, 2026



The Only Vendor ranked 2025 Gartner Customer's Choice for Field Service Management, Cloud ERP and Enterprise Asset Management based on verified customer reviews.







A Leader in the Verdantix Green Quadrant: Asset Investment Planning Software 2023, achieving top scores for long-term planning, risk management, ESG integration, and data analytics.

Transform Your Manufacturing Asset Strategy with IFS

Manufacturing operations cannot afford to continue managing assets through fragmented systems, reactive maintenance programs, and disconnected lifecycle decisions. As competitive intensity increases, regulatory requirements strengthen, and equipment complexity grows, Unified Asset Lifecycle Management becomes essential for operational excellence.

IFS Cloud delivers the only complete ALM solution purpose-built for manufacturing–connecting investment planning, project execution, operations, maintenance, and asset performance management within a unified platform.

Next Steps:

Manufacturing organizations evaluating their asset management approach should:

1. Assess current asset management maturity against industry best practices and competitive benchmarks

2. Quantify operational and financial impact of aging infrastructure, fragmented data, and reactive maintenance

3. Explore how complete ALM addresses manufacturing-specific challenges and enables measurable outcomes

4. Understand implementation approaches for transitioning to unified asset lifecycle management

Schedule a Manufacturing ALM Consultation Now

Schedule Consultation

Connect with IFS manufacturing asset management experts to:

- Review your current asset management approach and identify improvement opportunities
- See how IFS Cloud addresses manufacturing-specific challenges across discrete, process, and project-based operations
- Understand phased implementation approaches minimizing disruption while delivering rapid value
- Explore customer success stories from manufacturing organizations similar to yours

Book a Demo

About IFS

IFS is the world's leading provider of Industrial AI and enterprise software for hardcore businesses that make, service, and power our planet. Our technology enables businesses which manufacture goods, maintain complex assets, and manage service-focused operations to unlock the transformative power of Industrial AI™ to enhance productivity, efficiency, and sustainability.

IFS Cloud is a fully composable AI-powered platform, designed for ultimate flexibility and adaptability to our customers' specific requirements and business evolution. It spans the needs of Enterprise Resource Planning (ERP), Enterprise Asset Management (EAM), Supply Chain Management (SCM), and Field Service Management (FSM). IFS technology leverages AI, machine learning, real-time data and analytics to empower our customers to make informed strategic decisions and excel at their Moment of Service™.

IFS was founded in 1983 by five university friends who pitched a tent outside our first customer's site to ensure they would be available 24/7 and the needs of the customer would come first. Since then, IFS has grown into a global leader with over 7,000 employees in 80 countries. Driven by those foundational values of agility, customer-centricity, and trust, IFS is recognized worldwide for delivering value and supporting strategic transformations. We are the most recommended supplier in our sector. Visit ifs.com to learn why.

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