IDC MarketScape

IDC MarketScape: Worldwide Manufacturing Execution Systems 2024–2025 Vendor Assessment

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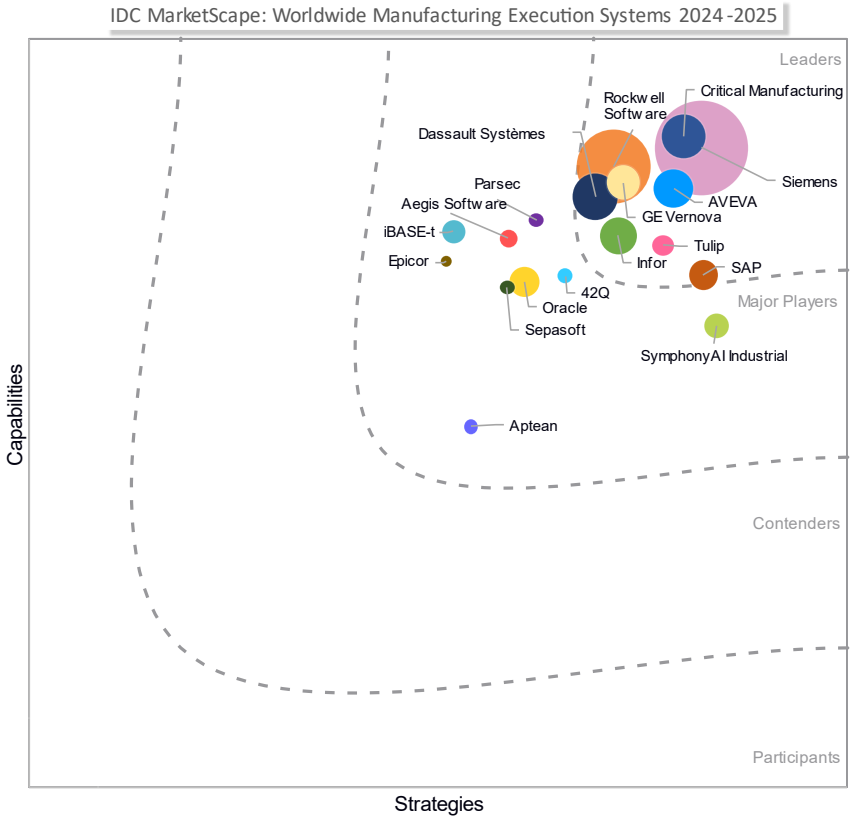
THIS IDC MARKETSCAPE EXCERPT FEATURES INFOR

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Worldwide Manufacturing Execution Systems 2024–2025



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

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IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Manufacturing Execution Systems 2024–2025 Vendor Assessment (Doc # US51813624). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

The need for shop floor processes to coordinate with rapidly evolving value chains requires that manufacturing execution systems (MES) work seamlessly with other enterprise and manufacturing-focused applications to ensure visibility from the shop floor to the top floor. The rise of the 3rd Platform, along with innovation drivers such as cloud computing, edge analytics, the Industrial Internet of Things (IIoT), and artificial intelligence (AI), is significantly influencing the development of MES. Recently, there has been a notable increase in the adoption of cloud solutions to enhance or overcome the limitations of traditional on-premises MES, providing organizations with improved flexibility and scalability. Additionally, there is a growing emphasis on extensibility and user experience, with low code/no code and plug-and-play features becoming integral to vendor offerings. As companies increasingly prioritize sustainability, MES implementations are also being utilized to facilitate energy management and broader sustainability initiatives.

The MES landscape is rapidly transforming, and while it is crucial to invest in solutions that meet immediate business needs, it is equally important to select systems that can adapt to evolving requirements. As innovative concepts continue to surface, choosing a vendor committed to long-term innovation while fulfilling business demands is vital. With a wide array of solutions available, it is essential to select an MES that caters to the specific characteristics of production processes and industries, can be deployed swiftly for immediate benefits, and is designed to remain relevant in the future.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

This vendor assessment includes software providers in the MES market serving the manufacturing industry.

For this IDC MarketScape, vendors should be active in at least two of the global regions of the Americas, Asia/Pacific, and Europe, the Middle East, and Africa (EMEA). Their MES applications should have a broad coverage of the entire range of plant floor–specific processes. Vendors active in this market should have a strategy in place to adopt a range of modern IT technologies — such as cloud and edge — and

game-changing plant floor technologies such as the Internet of Things (IoT), and AI as it applies to manufacturing execution systems.

ADVICE FOR TECHNOLOGY BUYERS

MES applications hold significant potential for generating valuable production data, enhancing workflow visibility, and contributing to informed decision-making.

- To fully harness this potential, organizations need to evaluate and optimize their internal production processes while selecting a vendor that aligns with their specific requirements. Although an MES is designed to tackle various aspects of performance, quality, and availability, companies must first pinpoint the key principles they wish to prioritize in order to identify the most suitable solution. Therefore, a comprehensive internal understanding of the process needs is essential.
- This understanding is crucial for gaining support within the organization and ensuring buy-in from all relevant stakeholders. Commitment from top management is vital to drive this initiative, but organizations should also recognize the importance of implementing training programs and knowledge-sharing platforms to assist technicians in effectively utilizing the solution on the shop floor.
- It is crucial for organizations to prepare their infrastructure adequately for the type of MES investment they need. It is important to invest in integrating their assets and production equipment, enabling data collection from all points in the factory to gain a holistic picture of the entire shop floor.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and opportunities.

Infor

Infor is positioned in the Leaders category in this 2024–2025 IDC MarketScape for worldwide manufacturing execution systems.

The Infor MES offering is primarily based on the 2021 acquisition of Lighthouse Systems, an independent MES provider, which led to the rebranding of its flagship product, Shopfloor-Online, as Infor MES. Following this acquisition, Infor has made significant investments in enhancing its integration capabilities and establishing standard connections with the broader Infor CloudSuites, incorporating advanced technologies from Infor OS.

The product encompasses a comprehensive suite of MOM functionalities, including Production, Quality, Inventory, Logistics, Maintenance, Tooling, Energy, and Workflow/EBR. Customers have the flexibility to implement varying degrees of functionality, starting with Production or Maintenance and layering on additional functionality as needed. Each functionality has conspicuous last-mile capabilities to cater to the specific requirements of target industries such as food and beverage, metal and plastic fabrication, packaging, paper and pulp, and automotive tier 1 and 2.

Infor MES provides both Enterprise and Distributed Enterprise options, facilitating the standardization of global master data and enabling cross-plant reporting and benchmarking. The Enterprise model manages all plants and warehouses in a single MES instance. The Distributed Enterprise model organizes the environment across multiple MES instances, with each instance managing one or more sites. This configuration allows for master data to be set up once and replicated across all locations, while simultaneously consolidating data from all sites for cohesive reporting and analytics. These capabilities are designed to assist COEs in managing change, standardization, and deployment throughout the organization.

Additionally, Infor MES leverages the extensive Infor partner network, which includes notable names such as Apex, Actemium, and PCG.

Strengths

Infor MES has long been recognized for its extensive configurability, ranging from "process type" configuration options to industry-specific out-of-the-box functionalities across discrete, process, batch, and assembly manufacturing. This adaptability has further advanced through "prototype" practices, where master data, functional options, and reports/dashboards are configured collaboratively with customers in specialized workshops.

From a functional perspective, notable innovations include the Workflow feature, which provides a structured hierarchy of configurable, reusable, and tested Operations, Phases, and Actions. These elements are sequenced using logical transitions to establish process flows via an intuitive drag-and-drop interface. Additionally, Infor MES's composable modules for Logistics (WMS), Quality (QMS), and Maintenance (CMMS/EAM) enable customers to streamline their IT environments by broadening the MES's role to encompass all production floor applications.

Infor MES is integrated within Infor's broader ecosystem, which includes Infor OS (supporting AI/ML/RPA, etc.), CloudSuite ERP, WMS, CPQ, PLM, HCM, WFM, and more. It is designed to seamlessly integrate with third-party applications through the Universal Data Interface (UDI). Furthermore, Infor MES boasts advanced bi-directional connectivity with all factory equipment, including machines, sensors, IoT devices, and metrology tools.

Infor is significantly investing in MES product development and innovation. A prime example is the recent introduction of contextual GenAI summaries, which transform complex reports into accessible insights that can be viewed or scheduled for email delivery. A collection of standard prompts is provided out of the box, with the option for additional prompts to be configured as needed. MES can transmit both raw and summarized data in real time to the Infor Data Fabric layer, facilitating the use of machine learning models to generate actionable predictions that can be the fed back into the MES.

Challenges

In a highly competitive marketplace, the company may find it challenging to stand out as composability and configurability become increasingly prevalent among rival offerings. Although Infor is a well-established name in the manufacturing sector, particularly in ERP and supply chain, it is less recognized on the shop floor. To enhance its visibility, the company must effectively communicate the operational benefits of its solutions, especially to audiences beyond its existing customer base. Additionally, until its multitenant cloud offering is finalized, the absence of a public cloud solution could hinder its progress as this option starts gaining more and more traction.

Consider Infor When

Infor should be considered by midsize to large organizations with multi-site requirements and a need for deep vertical-specific capabilities across all operational departments in the factory, and who are looking for a solution to support their COE team as their business changes through a configurable application they can own and manage themselves.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about

offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represent the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants and end users. Market weightings are based on user interviews, buyer surveys and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior and capability.

Market Definition

Manufacturing execution system is the software platform that covers all operational processes across a network of factories. Making a reference to the MESA Model (mesa.org/en/modelstrategicinitiatives/MESAModel.asp), the MES platform comprises the following MESA functions: product tracking and genealogy, resource allocation and status, performance analysis, process management, data collection acquisition, dispatching production units, quality management, labor management, warehouse management (logistics focus: transportation management system [TMS], warehouse management system [WMS]), maintenance management (asset reliability focus: enterprise asset management [EAM], computerized maintenance management system [CMMS], and operations and detailed scheduling. The MES platform is a common platform for multiple plants worldwide, and as such enables the standardization of operational processes and KPIs across the network of factories. The MES platform also includes enterprise manufacturing intelligence (EMI) functionalities to measure and analyze the performance of the network of factories. The MES platform must include standard integration procedures with plant floor controls (ISA-95 level 2 and below) and critical IT business applications, particularly ERP and PLM.

LEARN MORE

Related Research

- *IDC MarketScape: Worldwide High-Tech and Electronics Manufacturing Execution Systems 2023 Vendor Assessment* (IDC #US49435722, April 2023)

- *IDC MarketScape: Worldwide Engineering-Intensive Manufacturing Execution Systems 2023 Vendor Assessment* (IDC #US49435622, April 2023)
- *IDC MarketScape: Worldwide Discrete Manufacturing Execution Systems 2023 Vendor Assessment* (IDC #US49435422, April 2023)
- *IDC MarketScape: Worldwide Process Manufacturing Execution Systems 2023 Vendor Assessment* (IDC #EUR150526323, April 2023)

Synopsis

This vendor assessment includes software providers in the MES market serving the manufacturing industry.

The MES landscape is rapidly transforming, and while it is crucial to invest in solutions that meet immediate business needs, it is equally important to select systems that can adapt to evolving requirements. Choosing the right vendor can be a minefield, but the focus should be on selecting one that has a long-term commitment to driving innovation and addressing evolving business needs.

"As innovative concepts continue to surface, choosing a vendor committed to long-term innovation while fulfilling business demands is vital. With a wide array of solutions available, it is essential to select an MES that caters to the specific characteristics of production processes and industries, can be deployed swiftly for immediate benefits, and is designed to remain relevant in the future." — Lorenzo Veronesi, Associate Research Director, Manufacturing Insights, IDC

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