ABI RESEARCH COMPETITIVE RANKING

PRODUCT LIFECYCLE MANAGEMENT (PLM) FOR LARGE DISCRETE MANUFACTURERS

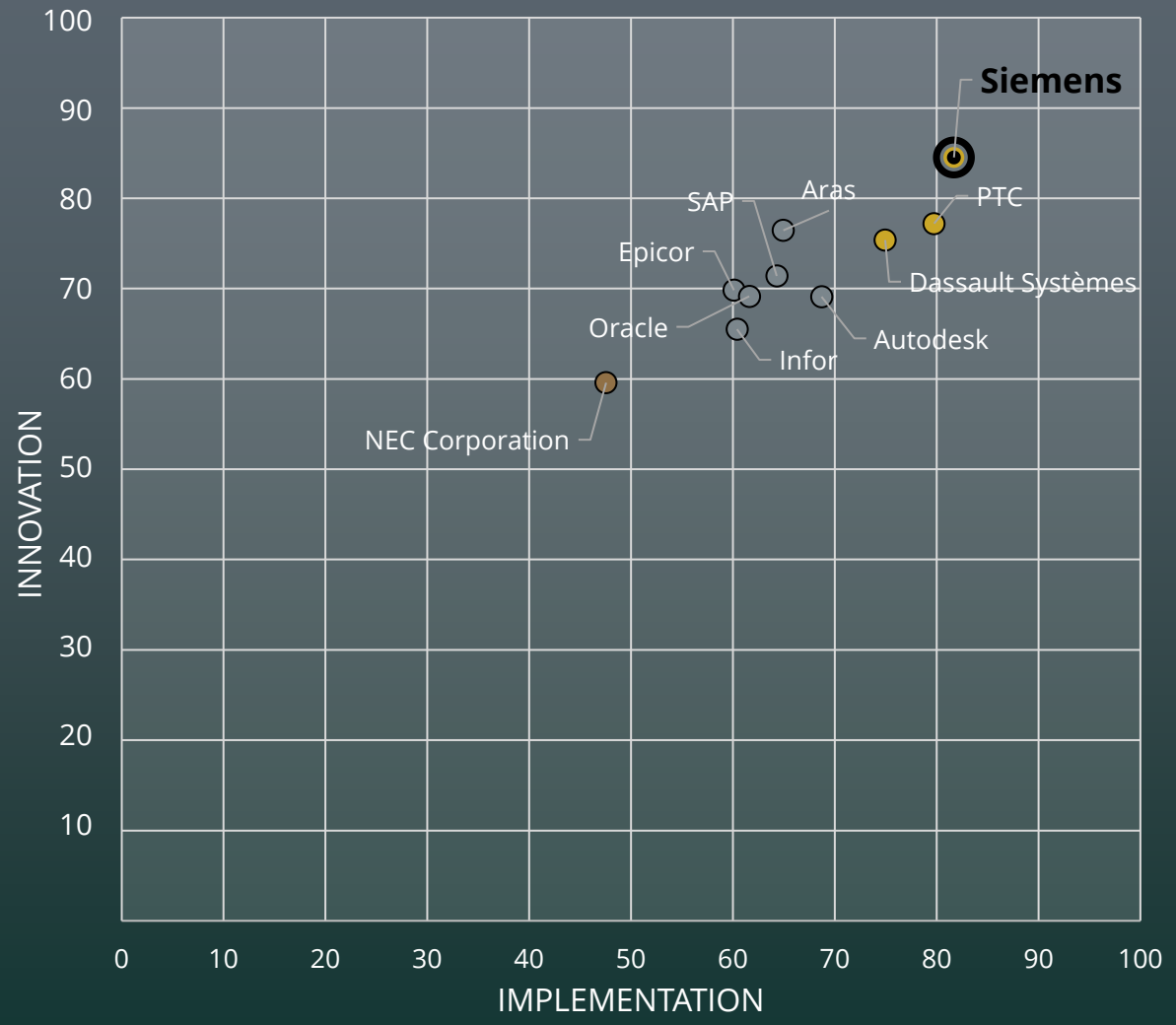
SIEMENS

OVERALL: 83.1 | INNOVATION: 84.5 | IMPLEMENTATION: 81.7 | RANK: 1

SIEMENS

OVERALL: 83.1 | INNOVATION: 84.5 | IMPLEMENTATION: 81.7 | RANK: 1

INNOVATION *VERSUS* IMPLEMENTATION MATRIX



INNOVATION

SIEMENS

INNOVATION SCORE: 84.5

Siemens Teamcenter is a complete PLM offering that connects to a range of manufacturing software, including ERP, SCM, CRM, Enterprise Asset Management (EAM)/Asset Performance Management (APM), WMS, Computer-Aided Technologies (Cax), simulation, Electronic Design Automation (EDA), MES, Internet of Things (IoT), SCADA, and QMS. Teamcenter provides Open APIs and enables no-code data connections through Mendix, which means scaling the solution to add additional features is seamless. Teamcenter improves collaboration for external parties through suppliers' portals and establishing visibility across internal teams in design, engineering, and manufacturing with real-time data sharing and updates. Teamcenter has native MBSE capabilities such as support for SysML v2, along with the ability to add access to third-party modeling tools such as IBM Rhapsody, Cameo, and Capella if required, which places Siemens above average as most solutions do not provide MBSE functionality. For digital twin build-out, Teamcenter can automatically generate digital twins of products if the appropriate infrastructure and data systems are in place.

Teamcenter excels at bringing together data from IoT, SCADA, historians, and more from design through production and enables full transparency within large discrete manufacturing organizations and contract manufacturers. It supports the highest number of tracked regulatory standards by any vendor at 50-plus and provides compliance tracking and part classification from a centralized, version-controlled digital library. Search capabilities include AI-enabled classifications, semantic search with natural language, Geolus shape matching and metadata filtering that facilitate efficient part reuse. The extent to which Teamcenter can search through alternative parts within PLM is comparable to other vendors such as PTC, Aras, and Dassault Systèmes in the innovation leader's category. Teamcenter also provides built-in capabilities for CPQ and Configuration Lifecycle Management (CLM), especially around Configure-to-Order (CTO) and Engineer-to-Order (ETO) processes. Built-in CPQ and CLM capabilities within Teamcenter is a differentiator in the market, as most vendors rely on pipeline connections to third-party CPQ or CLM providers. Embedded in the PLM is Teamcenter Copilot, which brings together document intelligence, BOM exploration, and conversational search into a single, natural language-driven interface.

For immersive engineering within PLM, Teamcenter supports Extended Reality (XR) technology in collaboration with Sony's XR headsets, although the solution is hardware-agnostic and can be used with other hardware providers such as Meta, HP, and HTC. Enhanced immersive engineering capabilities, including photorealistic rendered content, high-performance visualization, and real-time interactions for collaboration, are additional paid features; however, this is a market standard as all vendors require additional pay for AR/VR/XR functionality.

IMPLEMENTATION

SIEMENS

IMPLEMENTATION SCORE: 81.7

Siemens Teamcenter is a globally available PLM solution that caters to all markets except Russia. The solution is offered to all discrete industries and is the largest provider for PLM based on revenue. Teamcenter is available as an on-premises installation or as a cloud-based SaaS offering via Teamcenter X. This flexibility means customers can deploy in a manner that best suits the enterprise and its diverse range of needs. Its licensing models, including perpetual licenses, subscriptions, and usage-based consumption, mean that customers can purchase via Siemens directly, hyperscale marketplaces (e.g., Amazon Web Services (AWS), Microsoft), channel resellers, SIs, or Original Equipment Manufacturer (OEM) agreements. Hitting all options for procurement, Siemens is in the top cohort with only PTC and Dassault offering comparable services.

For post-sale support, Teamcenter includes Customer Success Plan options and includes assistance for supporting user success, including a centralized, AI-powered Support Center portal to make assistance easy to find. Additional resources such as online user community/forums, hands-on Customer Experience Centers, and online training courses are also available. To facilitate scalability, Teamcenter has no upper limit on the number of users and has role-based access control with a modular architecture for specific purchasing.

A unique feature of the Siemens Xcelerator portfolio is the use of fungible tokens to purchase modules when required and then return the tokens to an assigned pool for others in the organization to use at any time. This is a growing trend in the PLM market and differentiates Siemens, as only two other vendors currently offer similar flexibility with tokens. Currently, Teamcenter offers a “pay for what you use” consumption model. Large discrete manufacturers with layers of diverse, complex product types will find benefit to Teamcenter's pricing and licensing structures, along with the flexibility of scaling the solution without impediments.

CONCLUDING REMARKS

SIEMENS

Siemens Teamcenter is the overall market leader for PLM solutions catering to all large discrete manufacturers. With Teamcenter and Teamcenter X, Siemens provides the strongest offering for manufacturers looking for a complex PLM solution that can be configured, scaled, and deployed across all discrete industries. While scoring in the top percentile for all criteria, the standout feature that separates Siemens from the competition is an advanced Gen AI position with the inclusion of Teamcenter Copilot, an area in which vendors are still waiting to roll out solutions for general availability.

Additionally, Siemens holds the largest market share by revenue for PLM solutions and has a user base within the tens of thousands, resulting in the highest scores for the commercial success criteria. Another noteworthy strong suite of Teamcenter is the connectivity to the widest array of external manufacturing software through the Xcelerator Marketplace.

CRITERIA AND METHODOLOGY

VENDOR MATRIX

Methodology: After individual scores are established for innovation and implementation, an overall company score is established using the Root Mean Square (RMS) method:

$$Score = \sqrt{\frac{innovation^2 + implementation^2}{2}}$$

The resulting overall scores are then ranked and used for percentile comparisons.

The RMS method, in comparison with a straight summation or average of individual innovation and implementation values, rewards companies for standout performances.

For example, using this method, a company with an innovation score of nine and an implementation score of one would score considerably higher than a company with a score of five in both areas, despite the mean score being the same. ABI Research believes that this is appropriate as the goal of these matrices is to highlight those companies that stand out from the others.

RANKING CRITERIA

Leader: A company that receives a score of **75 or above** for its overall ranking.

Mainstream: A company that receives scores **between 60 and 75** for its overall ranking.

Follower: A company that receives a score of **60 or below** for its overall ranking.

Innovation Leader: A company that receives a score of **75 or above** for its innovation ranking.

Implementation Leader: A company that receives a score of **75 or above** for its implementation ranking.

INNOVATION CRITERIA

Digital Thread Creation: How does the PLM solution connect to other manufacturing software, including in-house and third-party solutions? Does the solution utilize Rest APIs, low/no-code connectors, or pre-built connectors to all major manufacturing software outside of PLM? A good score for digital thread creation entails connections to core manufacturing software such as CAD, MES, SCM, and ERP. Excellent scores include the use of RESTful APIs to connect further manufacturing software such as WMS, Supervisory Control and Data Acquisition (SCADA), Quality Management System (QMS), and simulation.

Digital Twin Usability: What data can be tagged within the digital twin and how are twins scalable to large discrete manufacturers? Does the solution tag digital twins with relevant information from the essential domains of industry: design, engineering, production, and supply chain? A good score for digital twin usability features key data tagging such as product obsolescence, non-compliance notifications, and supply chain updates. For excellent scores, vendors must build upon the data tagging, while also proving the ease of scalability for multiple digital twins in the form of pre-built digital twin templates, real-time sharing of digital twins between design, engineering, and manufacturing teams, and the ability to compare multiple digital twins simultaneously.

Product Traceability: What product regulation standards are tracked within the solution? How does the solution enable transparency across multiple teams and serve the needs of large discrete manufacturers as it pertains to BOM complexity and configurations? Does the solution demonstrate a high level of compliance with multiple national and industry standards, along with enabling actions such as real-time data sharing for enhanced collaboration? An excellent product traceability score entails a centralized component search base that includes search by part name, material, lead times, supplier rating, or equivalent parts. For BOM complexity, vendors must show that the PLM solution can handle BOMs within the range of 30,000 to 50,000 for the automotive industry, with excellent being 1 million-plus for use in the A&D market.

New Technology: To what degree does the solution deploy Gen AI or Agentic AI? Does the solution have native Augmented Reality (AR)/Virtual Reality (VR) capabilities and to what degree do the vendors lean on partnerships? Does the solution have an integrated Copilot or Large Language Model (LLM) that provides natural language query and assists new users in locating PLM functionality, and experienced users to optimize workflows? For an excellent score in new technology, solutions must have a dedicated Copilot naturally integrated within the solution that comes from in-house development or through partnerships with LLM creators and offer AR/VR capabilities agnostically with key headset providers such as Meta, Sony, and HTC.

IMPLEMENTATION CRITERIA

Commercial Success: Does the vendor provide a leading PLM solution in discrete manufacturing industries or are they losing out to competition? To what degree does the solution actively serve large discrete manufacturers, and to what extent do they hold market share in comparison to competition? Good scores for commercial success are awarded to vendors that are in the top half of market share leaders, along with having a customer base above 1,000 users. Excellent scores are awarded to vendors that place within the top three for market share and have a user base in the tens of thousands.

Global Reach: Is the solution available globally and has strong growth rates in emerging manufacturing regions? To what degree does the solution serve all the discrete manufacturing industries? Is the solution expanding in high-growth regions such as the European Union (EU), the Americas, and Southeast Asia, while offering services to all or many of the six discrete manufacturing industries? Good scores are given to vendors with solutions that are available globally and serve at least four out of the six discrete industries tracked. Excellent scores are awarded to vendors that offer the PLM solution globally, have high growth rates in promising manufacturing regions such as the Americas, the EU, and Southeast Asia, along with servicing six or more discrete manufacturing industries.

Pricing, Purchasing, and Deployment: Is the solution offered as both on-Premises and SaaS? Does the solution have multiple avenues of purchase, e.g., direct from vendor, tokenization, Value-Added Resellers (VARs), Independent Software Vendors (ISVs), and hyperscalers? Flexibility in pricing, purchasing, and deployment means that PLM vendors offer both on-premises and SaaS-based solutions, along with purchasing through all mainstream organizations and marketplaces. A good score in pricing, purchasing, and deployment are PLM solutions that offer both on-premises and SaaS options, along with selling the solution directly Business-to-Business (B2B), and through ISV and VARs. Excellent solutions extend further and offer PLM via subscription, utilize role-based purchasing, have modular functionality, and provide the option to purchase with flexible or fungible tokens.

Time to Impact and Scalability: How long does it take a typical customer to realize value for the solution? To what degree does the vendor support the end-using client post-sale? Can the solution be implemented with a high degree of configuration in under 6 months? Are configurations and customizations possible in-house or primarily undertaken by third-party SIs? Good solutions will have deployment times from 6 months and above for complex configurations, along with online resources and B2B training for scaling the solution to new users. Excellent PLM solutions for time to impact and scalability have deployment times below 6 months, do not require extensive work with outside consultants or third-party integrators, and have functionality in place to rapidly deploy the solution at new sites without heavy customization.

July 14, 2025

New York, NY 11771 USA
Tel: +1 516-624-2500
www.abiresearch.com

ABI Research is uniquely positioned at the intersection of end-market companies and technology solution providers, serving as the bridge that seamlessly connects these two segments by driving successful technology implementations and delivering strategies that are proven to attract and retain customers. For further information about subscribing to ABI's Research Services as well as Industrial and Custom Solutions, contact us at +1.516.624.2500 in the Americas, +44.203.326.0140 in Europe, +65.6592.0290 in Asia-Pacific or visit www.abiresearch.com.