

# Siemens Realize LIVE 2025

## Harnessing complexity for a competitive advantage

### Takeaways

Siemens is continuing its move to SaaS and cloud delivery of its Siemens Xcelerator industrial software portfolio with strong adoption by small- to medium-sized businesses.

Product, manufacturing, and supply chain complexity continues to increase, and Siemens is developing solutions that will help their customers harness that complexity to achieve a competitive advantage.

Teamcenter can now identify and report on software and hardware compatibility within a product. This enables a company to initially deliver the correct combination and maintain the correct compatibility throughout the product's life, as both its software and hardware evolve.

Siemens continues to embed AI at all levels and use it throughout their solution portfolio. AI is part of their solutions, not just as a technology add-on. Additionally, Siemens is constructing an Industry Foundation Large Language Model based on their decades of industrial experience, deep, rich data sets, and manufacturing best practices.

CIMdata attended Siemens Digital Industries Software's Realize LIVE Americas 2025, held in Detroit, MI, from June 2 to June 5, 2025.<sup>1</sup> As part of Realize LIVE 2025, Siemens included a curated experience of special sessions and executive interaction for media and analysts. Hearing about and discussing Siemens' announcements, technologies, and solutions with customer attendees, event sponsors, and Siemens' leadership was highly informative as Siemens continues to push the boundaries of multi-disciplinary lifecycle product data management, development, production, and service. During the Analyst and Media session, Siemens reported that Realize LIVE 2025 saw a 30% increase in overall attendance and a 35% rise in customer speakers compared to previous events. This increase was also seen at Realize Live Europe.

Mr. Tony Hemmelgarn, President and CEO of Siemens Digital Industries Software ("Siemens"), kicked off the event with a focus on the importance of an enterprise Bill of Materials (Enterprise BOM) and dealing with the ever-increasing complexity of manufacturing. He stated that products of all types are becoming more multi-domain and complex. They consist of mechanical, electrical, electronic, and software components, each of which has defined requirements and structures. To efficiently and accurately design, develop, produce, and service such products, manufacturers must be able to manage multiple domain-specific views of the BOM in a unified, enterprise-wide structure to ensure configuration completeness

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<sup>1</sup> Travel and/or other expenses related to this commentary were provided by Siemens Digital Industries Software.

and consistency throughout the life of the product. Mr. Hemmelgarn described how Siemens is delivering an enterprise BOM capability within Teamcenter that allows each domain to be defined and updated independently and consistently within a single, consolidated BOM with seamless cross-domain collaboration. He noted that Siemens had improved Teamcenter BOM capabilities in many areas, including:

- 20x faster performance
- Enabling independent release of domain-specific BOMs
- Support change across the enterprise
- Providing one configurator for part, plant, and sales

Mr. Hemmelgarn noted that 90% of businesses don't grow because of their legacy applications, and the cost and resources required to maintain them. Additionally, he stated that its low-code application development environment, Mendix, is being used to enable their customers to adapt, expand, and integrate their legacy (and non-Siemens) applications to better meet their evolving business needs.

He closed his keynote by stating the gamechanger for manufacturers is to combine the real and digital worlds and that a key factor in doing this is having a comprehensive digital twin. Finally, Mr. Hemmelgarn stated that Siemens is committed to delivering technology and solutions that help their customers turn complexity into a competitive advantage. CIMdata believes that companies that can better deal with the increasing complexity of multi-domain products and their production and service will be better positioned to deliver the products and services their customer's demand.

Mr. Joe Bohman, Executive Vice President, PLM Products, headlined the second day's keynote. His talk highlighted the increasing complexity of today's products, such as the 500 million lines of code (and growing) in an automobile, and how Siemens is delivering solutions to help its customers harness complexity for a competitive advantage. As part of dealing with complexity, Mr. Bohman discussed four aspects of the challenge, as well as Siemens' approach and solutions to address them:

- Accelerated Product Development—combined AI and simulation, multi-disciplinary aware design and collaboration, train AI on the language of engineering and manufacturing using an industrial foundation model.
- Software-Defined Products—integrated Development/Security/Operations (DevSecOps), continuous verification, incorporated functional safety standards, cyber security, and compliance, all supported by collaborative systems modeling.
- Integrated BOM Management—integrated BOM management platform with unified change/configuration/DMU, independent release, unified configurator, enterprise change through the complete product life cycle, including service, use, and disposal.
- Smart Manufacturing—complete digital twin of manufacturing process and production systems, standardize operator MES user experience, and adapt and extend manufacturing applications using low code technology.

CIMdata believes that Siemens' approach to addressing these complexity-related challenges can help its customers create and service the increasingly complex products needed in today's competitive markets.

Mr. Bohman also demonstrated an evolution of Teamcenter's user interface/experience. Elements of this new UI/UX are already incorporated into Teamcenter (and Teamcenter X) Essentials, Standard and Advanced, with full implementation to be available by the end of 2025. This new UI is more user controllable, context driven, and visually appealing.

Ms. Frances Evans, SVP Lifecycle Collaboration Software, and Mr. Bill Lewis, Director of Marketing, Lifecycle Collaboration Software, led a session titled "Teamcenter Keynote: PLM of the Future." This session primarily focused on a Teamcenter update, featuring demonstrations of new capabilities. Details about Enterprise BOM management, creation, and use were presented with use cases that follow product creation, e.g., supply chain management as parts suppliers change due to government driven tariff changes. The multi-domain breadth of the Teamcenter solution from Enterprise BOM management to MBSE to Configurator to requirements management is excellent. These capabilities have evolved within the Teamcenter platform even though some of the original functional capabilities came from several Siemens' acquisitions. CIMdata thinks that Siemens is effectively incorporating capabilities from these acquisitions within Teamcenter and the rest of Siemens' Xcelerator portfolio.

Siemens held a special session for media and analysts the morning of the third day of the event. Ms. Brenda Discher, Head of Communications and Marketing and SVP Business Strategy and Marketing, Siemens Digital Industries Software, opened the Media and Analyst session. During her remarks, Ms. Discher noted that many attendees had been asking why Siemens hadn't been discussing AI more (at Realize LIVE 2024, AI was a major topic of discussion). Her response was telling (and was reinforced throughout the Analyst and Media session by both Mr. Hemmelgarn and Mr. Bohman). She stated that everything Siemens had been showing and demonstrating throughout Realize LIVE 2025 had AI embedded in its core. Mr. Bohman stated that all six of his mainstage demonstrations incorporated AI. Ms. Discher defined what Siemens is calling "lifecycle intelligence" (i.e., embedding AI into all aspects and components of Siemens Xcelerator portfolio). They are not treating AI as an add-on technology but as foundational to their technology architecture. Ms. Discher emphasized how using Siemens' industrial experience to build the Industrial Foundation Model, Siemens will teach AI to understand the language of engineering and manufacturing so they can deliver pragmatic solutions. They are the only PLM solution provider who has a wealth of their own experiences (Siemens AG is a major manufacturer) to build such a large language model (LLM). CIMdata thinks this "less talk and more action" approach is both refreshing and pragmatic.

Mr. Hemmelgarn followed Ms. Discher and discussed how Siemens continues to make strategic investments (over \$14 billion in the past year) to continue to build out their overall portfolio, adding additional capabilities to address more and more aspects of the concept-to-service lifecycle. He also discussed the importance of Siemens' ability to enable a customer of any size to scale their functional PLM capabilities up or down seamlessly as their business needs dictate whether on-premises, cloud, or hybrid solution delivery with no loss or re-entry of data. He noted that 70% of their new customers had chosen SaaS delivery.

During his talk, Mr. Bohman stated that Polarian is the fastest growing component of the Siemens Xcelerator portfolio, averaging over 30% CAGR for the past several years. He noted that as software had become a more dominate component of today's complex products, many warranty issues are the result of software and hardware incompatibility. He described (and showed an example) how Siemens has addressed this issue by adding a software/hardware compatibility matrix capability within Teamcenter. Polarian also is the coordinator of popular third-party ALM solutions (e.g., GitHub and Jira) interfaced into Teamcenter. CIMdata believes that the ability to identify and maintain software and hardware compatibility is, and will be, increasingly important to the ability of manufacturers of all types of products to deliver and service the multi-domain products their customers demand.

Mr. Sam Mahalingam, Head of Simulation, Test, HPC and Data Analytics, Siemens Digital Industries Software, shared his goals for evolving simulation and analysis augmented with AI techniques. He stated that AI must be introduced into product development and service without disrupting business processes, though it well could automate workflows. This led to a discussion on how AI should aid the engineer,

freeing them from administrative and other non-value-added tasks, and giving them more time for real engineering work. CIMdata also expects Siemens will integrate Altair capabilities into their Xcelerator platform.

Mr. Mike Elow, CEO Siemens EDA, Siemens Digital Industries Software, stated that today, software and electronics are powering our world; software is providing the key functional capabilities of today's increasingly complex products. He also discussed how the silicon upon which the software runs is now being purpose-built to support the needs of software-defined functionality. Mr. Elow discussed how more products are being software defined, AI powered, and silicon enabled. He noted that this increasing product complexity is requiring better multi-domain requirements, data, and configuration management. To achieve this, he noted, a very complete, comprehensive digital twin is required. He described how a change in software can require significant changes in other aspects of an asset—the software requires more power, so a larger, heavier battery is needed. This requires improved breaking and suspension to handle the increased weight, etc. Mr. Elow also noted that in this complex scenario, multiple design and validation groups are required to share information and changes to update the asset's design so that it will meet the desired requirements, e.g., range. CIMdata agrees with Mr. Elow that more comprehensive integration of software and hardware design, data, and configuration management are key to enabling manufacturers to create and update the complex, software-driven products that customers are demanding. We believe that Siemens is providing a comprehensive portfolio of solutions, e.g., Teamcenter and Siemens EDA, to meet their customers (and their customers' customers) needs.

On the third day of the event a session titled "Plan, Document and Verify Your Multi-Domain Requirements" described how to use Teamcenter Requirements to optimize requirements and authoring, create test plans and verify testing progress, and extract the value of a multi-domain requirements and test strategy. The session's demonstration included complete end-to-end tracking of multi-domain requirements creation, documentation, verification, and validation through test planning, execution, and validation. CIMdata believes a multi-domain approach is critical to full systems engineering development and is pleased to see Siemens providing an effective solution to this issue.

Throughout Realize LIVE 2025, Siemens presented new capabilities within, and how to best use, all elements of the Siemens Xcelerator portfolio. Many different customers described and discussed how they had deployed those solutions to better enable their ability to design, develop, produce, and service today's increasingly complex products and continue their digital transformation journey.

## Concluding Remarks

Siemens Realize LIVE 2025 showcased Siemens' continually expanding vision and the solutions they are delivering in support the full lifecycles of complex products. Siemens continues to expand creation, management, and use of PLM created and/or managed data across the extended enterprise. Siemens Xcelerator is a broad, integrated suite of solutions, as well as a platform upon which customers can incorporate non-Siemens technology and applications. Siemens continues to expand the scope and depth of Siemens Xcelerator, and its use continues to grow within other Siemens AG business units.

Siemens continues to move rapidly to deliver its entire solution portfolio via SaaS, while remaining committed to its support of on-premises implementations. Their hybrid approach enables customers to move to the cloud when, how far, and how fast the move best fits each company's needs. Siemens' commitment to supporting open ecosystems (implemented with cloud-based and open tools) gives their customers the freedom to implement what they prefer and to leverage their investments in non-Siemens solutions.

CIMdata believes that Siemens' initiatives to help their customers better harness the continually increasing complexity of the manufacturing world constitutes an excellent step forward. We also like Siemens' pragmatic AI approach—"less talk and more action" is what their customers need and want.

## About CIMdata

CIMdata, a global, independent strategic management consulting firm, provides services designed to maximize an enterprise's ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit [www.CIMdata.com](http://www.CIMdata.com) or email [info@CIMdata.com](mailto:info@CIMdata.com).