



# CIMdata: 40 Years of Guiding PLM's Evolution

Over the past several decades, Product Lifecycle Management (PLM) has grown into a technological force that “brings things together” so that product developers, manufacturers, systems integrators, users, owners, and support personnel can make sense of all that is going into, and happening to, products and physical assets. This is crucial to maximizing and extracting value from their definitions.

CIMdata has been at the forefront of the ever-evolving PLM landscape for four decades. As we celebrate our 40<sup>th</sup> year in 2023, we reflect on the transformation PLM has undergone and how CIMdata's journey, in many ways, mirrors the evolution of PLM itself.

Over its 40-year journey, CIMdata has become the PLM industry's leader in education, research, and strategic management consulting. We have tracked PLM's maturation from its roots in mechanical CAD and CAM and its formative configuration as product data management (PDM). We have done so by keeping: our clients and the market abreast of relevant trends, challenges, new technologies, and their risks; up to date on the common definitions of major market developments; informed of the keys to PLM strategy development, ROI justification, adoption, implementation road mapping, and planning; and education and training with an extensive assessment-based certificate course offering.

Viewed from the perspective of our clients (both those who create and implement PLM-enabling solutions and those who use those solutions), all of the above are essential if any high-impact business-

enabling technology is to be effectively implemented.

In many ways, CIMdata has defined the PLM industry, and in many ways, we have been defined by it. We grew alongside and with PLM because when system integrators and users struggled, we were there to help. Solution providers also turned to us for advice and counsel frequently. Consequently, we gained expertise in the required core capabilities plus newer technologies, such as those related to the Internet of Things (IoT), Big Data with its infinite repositories; architectures, applications, systems, and tools moving into the Cloud; Product as a Service (PaaS) business models; additive manufacturing; and many others. Plus, an organization's overall digital transformation, of course.

Over the last four decades, CIMdata has tracked and analyzed the evolution and maturation of PLM with more than 1,000 publications—white papers, eBooks, commentaries, highlights, executive summaries, position papers, product and program reviews, and dozens of trade media articles. Highlights are shown below.

Founded in 1983 with an IBM contract in computer-integrated manufacturing (CIM) marketing sizing, we have continually led our clients on insightful and innovative journeys. We help system integrators and users meet challenges in evaluating software, defining costs and benefits, calculating returns on investment (ROIs), and justifying resources, to name just a few. We also help solution providers stay abreast of marketplace segmentations, new trends

and business requirements, more effective collaboration, and updates to best practices.

Although we focus on strategic management consulting services, CIMdata's business model integrates these services with research and education. No other organization has been able to match what we have achieved while helping PLM reach prominence. And like PLM, CIMdata is still evolving.

From its founding, CIMdata concentrated on the growth, reach, and changes in digital enablement—from Digital Twins, Digital Threads & Webs to end-to-end lifecycle connectivity and the overall digital transformation of the entire product lifecycle. We have grown through consulting, education, and research in an interlocking combination of mission-critical deliverables, new business services, and focused practice groups addressing specific aspects of PLM.

Most visible in all this are CIMdata's annual gatherings for users and solution providers—our PLM Road Map™ conferences (now in their 30<sup>th</sup> year) in the U.S. and Europe and our PLM Market & Industry Forums held around the world. At these events, users interact with their industry peers. At the same time, solution providers get a glimpse into rivals' newest product offerings and strategies, and CIMdata's industry-leading market research team describes key market trends and insights.

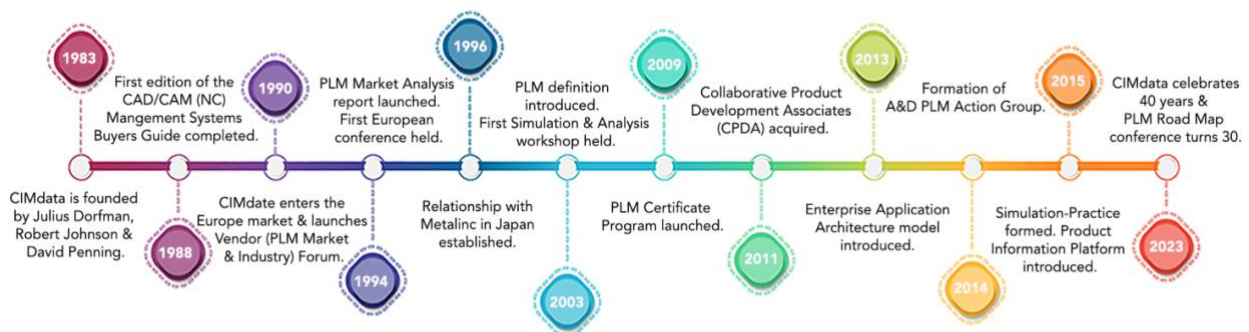
Over the years, CIMdata has added to its market analysis roots to provide consistent and unbiased statistics for PLM (see Market Analysis Reports (MARs) at [www.CIMdata.com](http://www.CIMdata.com)) and associated technologies—including groundbreaking research undertaken by its Aerospace & Defense PLM Action Group ([www.ad-pag.com](http://www.ad-pag.com)) on the adoption and use of Digital Threads and multi-view BOM requirements in the Aerospace & Defense sector, to name just a few topics covered.

In addition, CIMdata provides daily and weekly newsfeeds, implementation consulting and analysis services to PLM users worldwide, ongoing research into market specifics and competitive analyses, as well as education and customized training in systems modeling and simulation, digital transformation, and, of course, PLM basics.

CIMdata also leveraged its business model into nearly a dozen practice areas:

- Additive manufacturing/3D printing
- Advanced materials & processes
- AEC & its convergence with manufacturing
- Collaborative innovation & social product development
- Data governance & configuration management
- Digital skills transformation
- Mechatronics

## Highlights in CIMdata's 40-year Journey



A graphical representation of CIMdata's lifecycle of thought leadership shows how CIMdata has tracked and analyzed PLM developments and milestones. Nearly all this information is available online at [CIMdata.com](http://CIMdata.com), free of charge in most cases.

- Model-Based Design (MBD) & Model-Based Systems Engineering (MBSE)
- Quality & reliability
- Simulation-driven systems development, and
- Sustainability & renewable energy.

To keep our services and thought leadership up to date, CIMdata regularly brings on new consultants savvy in all aspects of PLM, old and new. We choose new team members for their deep experience and proven success in dealing with outdated “legacy” systems, customized and home-grown PLM and PDM, the latest application of cutting-edge PLM enabling technologies, and overcoming resistance to change.

CIMdata’s core strength is its independence. CIMdata tracks hundreds of PLM solution providers while not representing any of them. Our unbiased positioning has established us as the go-to organization on six continents.

Our unique breadth and depth of PLM comprehension are unparalleled. Many similar organizations disappeared because of limited, ad-hoc goals. Solution providers, for example, occasionally banded together to tackle regulatory headaches. Users frequently joined forces to demand that solution providers make sure capabilities already in users’ hands behave as advertised. All ultimately faded away without an organization like CIMdata providing necessary support.

Our first 40 years were just the start, and as we embark on the next 40 years, we recognize that the journey is far from over. While PLM and its enabling technologies have come a long way, much work remains. For the most part, PLM is still viewed as an engineering problem, which couldn’t be further from the truth. In the future, CIMdata, PLM solution developers, system integrators, and users will work together closely together to address common challenges such as:

- **Business Platforms** which have evolved into fully digital environments to support complex products and assets for their entire lifecycles.
- **Model-Based Enterprise** (MBE), its meaning, purpose, value, and how to best attain the most appropriate level of maturity.
- **The Metaverse**, in which leading PLM solution providers are investing billions.
- **Industry 5.0**, in whatever form it and Industry 4.0 eventually take.
- **Artificial Technologies**, both generative and natural-language-based.

CIMdata’s future is bright, and we eagerly anticipate what the next four decades will bring. Together with the ever-evolving PLM landscape, all of us at CIMdata are committed to guiding the way, as we have for the past 40 years. We look forward to continuing our role in defining what comes next in digital transformation.