

# Geometric's PLM+ Methodology Enhances PLM Business Value

## *CIMdata Commentary*

### *Key takeaways:*

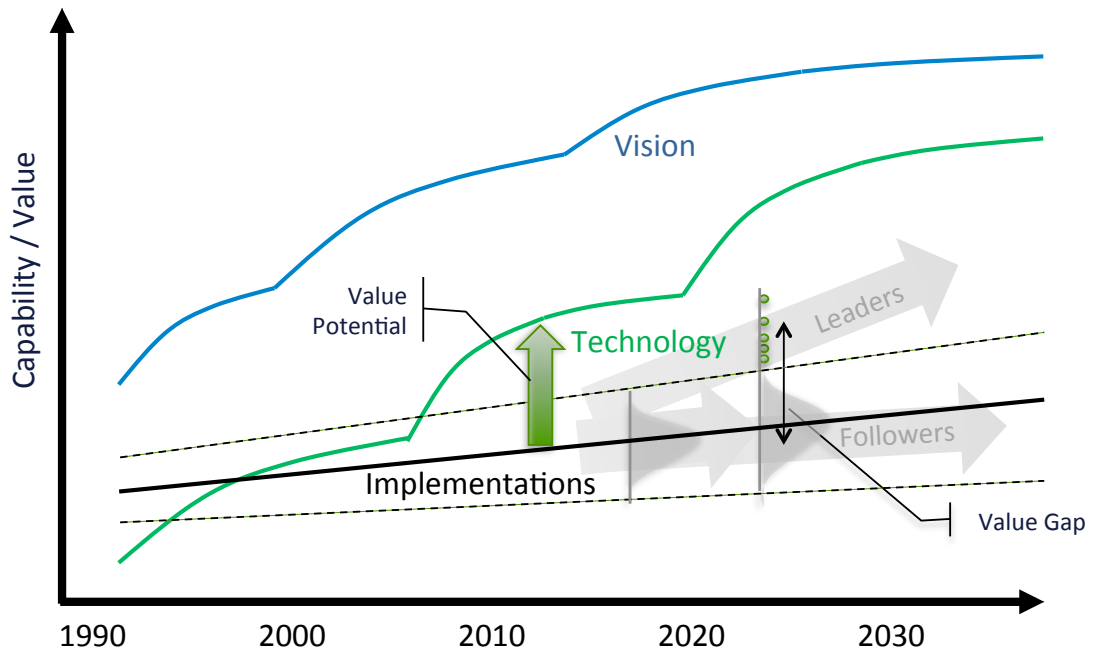
- *Increased product complexity and global competition are driving manufacturing companies to increasingly look at PLM for competitive advantage*
- *Inconsistent alignment of enterprise value elements is leading to a widening of the value gap between the projected value and realized benefits of PLM systems*
- *Automotive, aerospace, and industrial product companies are implementing PLM best practice templates and rationalizing end-to-end application platforms to add flexibility via simplification and optimization*
- *Geometric's PLM+ methodology contains a variety of PLM offerings including consulting and products that lead clients along the most effective path to optimize their PLM environments to deliver maximum business value*

Business challenges are growing larger every day including global competition, regulatory compliance, higher customer expectations, multiple product variants, time to market, and of course, cost. Products and their development processes are growing in complexity to address the challenges. Additional complexity appears in many areas including product specification, business processes to develop and produce the product, and IT systems that capture and manage the product information and support internal and external collaboration.

Product complexity is driven by the need to satisfy customer, market, regulatory, and sustainability requirements. More variants and options are required to meet the range of customer needs. More and more electronics and software are being incorporated to add useful features, provide product and variant differentiation, and even support new business models. All these factors add time and cost to product development efforts as well as impacting downstream activities including inventory management, production, and even after-sales support.

In order to support increased product complexity, business processes have had to adapt. "Glocalization," the combination of global and local markets, has dramatically increased process complexity. Companies need partners to support increasing product design complexity and suppliers to produce the additional components and subsystems. In addition, products must be designed to support global requirements to increase volumes and reduce unit costs. But they must also support local market adaptation and even local production. This variation in processes and even supplier capability can have significant impact on manufacturing or assembly costs, quality, and on time delivery.

IT technology is required to support modern businesses of every size. The technology has evolved dramatically in capability and scope over the last few decades. Unfortunately, it can be difficult and costly to provide enough resources to maintain the required technology and business systems at a state of the art level. Historically technology was deployed to solve business problems for individuals or departments. This strategy typically led to silos of information and disconnected processes that cause slower process execution and reduced data quality resulting in poor product quality, higher costs, and slower innovation.



**Figure 1—The PLM Value Gap  
(Based on CIMdata Research)**

CIMdata research in the A&D industry identified a PLM investment value gap as shown in Figure 1. This research shows the gap between the technical capabilities of PLM solutions and actual implementations. It illustrates that PLM leaders are getting more capability and value from their technology investments and implementations, and that the gap is widening between leaders and followers. Leaders have properly planned and implemented PLM strategies and enabling technologies that support current and future business needs. Over time the benefits accumulate and the gap between the leaders and follows widens. In order to be a leader, a company needs to develop a clear, holistic PLM strategy, implementation plan, and support and upgrade plan and follow through with an effective execution of those plans.

### **Geometric's PLM+ Methodology**

Geometric is a well-known technology and IT services provider to manufacturing companies. They focus on supporting end-to-end product lifecycle related processes and technologies that help companies bring products from concept through production and into service.

PLM+ shown in Figure 2 is Geometric's methodology for bringing PLM into manufacturing companies by providing strategic consulting and planning, implementation and optimization services, and focused tools and technologies. Each of these areas is designed to complement one another and to enable their customers to achieve maximum value from their PLM investments.



**Figure 2—The Breadth of Geometric's PLM+ Offering**  
(Courtesy of Geometric)

Their PLM consulting process uses a well-defined, value driven methodology. A variety of tools within the PLM+ framework support clients that are new to PLM technology as well as companies with mature PLM implementations. Experienced consultants and program managers work with clients to develop a key process indicator (KPI) baseline, PLM strategy roadmap, solution architecture, and implementation plan that can leverage technology from all the major solution providers for the full product lifecycle. A key part of the plan is the inclusion of KPIs based on Geometric's implementation experiences. The KPIs guide the implementation project and long-term operation of the PLM environment ensuring that planned value is realized.

Geometric reviewed several case studies with CIMdata that emphasized key capabilities and successes. The case studies showed:

- Engagements of more than a decade showing long term customer satisfaction
- Support of more than 500 applications in a large aerospace company
- Quantified business benefits including:
  - 5-10% Productivity improvement
  - 10-15% Application inventory reduction
  - 5-10% Product development time reduction
  - 15-25% Total cost of ownership (TCO) reduction

In addition to systems integration and consulting services, Geometric has developed a number of products and solutions to support PLM environments that help to ensure data and processes flow efficiently across the enterprise. These solutions are based on Geometric's knowledge of customer needs from engagements, engineering background, and software development expertise. Geometric's PLM related products and solutions include:

- Templates— Industry best practices are encapsulated as out-of-the-box solutions for the main commercial PLM solutions. The templates are used both by companies new to PLM as well as veterans and provide a sound way to shorten implementation time and achieve benefits more quickly.

- Interoperability Solutions—Products that support integrations between Dassault Systemes, PTC, and Siemens PLM products.
- [AMS4E<sup>1</sup>](#)—A methodology to maximize the value of technology investments using maturity-based assessments to transform business.
- GeometricEDGE—This new product is a cloud-based collaboration environment that enables interconnection between PLM solutions while supporting business rules and protecting intellectual property.
- [DFMPro<sup>2</sup>](#)—This product captures and reuses manufacturing best practices to assess product designs and determine the best way to produce them.
- QM/CAPA—A tool that implements the CAPA process in Teamcenter.

Geometric's products and solutions focus on streamlining and automating product development processes in areas where manufacturing companies need help. The products and solutions are a differentiator for Geometric and enable them to add value to their customers' PLM environments.

## Conclusion

Increasing product and process complexity is putting more and more pressure on companies. Many of the complexity drivers are beyond organizations' control, leading industrial companies to use PLM solutions to manage complexity in a holistic way so they can thrive in the marketplace.

CIMdata believes that Geometric has a comprehensive and pragmatic approach to solving product and business complexity issues. They have a clear vision of PLM and a deep understanding of the tools, technologies, and processes required to implement PLM in a wide variety of mature and emerging manufacturing industries. Their commercial software offerings are a significant differentiator. Their software applications are focused on supporting niches that require deep process knowledge such as DFX, CAM, and industry specific configuration requirements. By using their industrial knowledge, technical skills, and proprietary technologies Geometric is able to help clients plan, implement, and improve their business performance with a holistic end-to-end PLM implementation. CIMdata recommends that companies looking for a partner to help them implement and leverage their PLM investments for maximum benefit include Geometric in their evaluations.

## About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata's services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.

---

<sup>1</sup> <http://www.cimdata.com/en/resources/cimdata-blog/item/289-geometric-enhances-plm-business-value-commentary>

<sup>2</sup> <http://www.cimdata.com/en/resources/complimentary-reports-research/commentaries/item/3345-design-with-confidence-commentary>