



Digital Engineering

Geometric's Digital Engineering solutions accelerate the product development cycle from design creation to utilization, by identifying and enabling efficiencies in engineering processes through a synergy between CAx tools and PLM systems.

Engineering organizations across the globe optimize their product development cycle to bring products to market faster at the least possible cost. Engineering executives are, increasingly relying on CAx technology to tackle this challenge. Geometric's Digital Engineering offering is a framework to further leverage investments in CAx tools to achieve higher engineering efficiency.

What We Offer

Geometric's solutions look beyond conventional design automations to speed up design creation/ modification and streamline design transformation for better downstream utilization.



Business Benefits

- Enhance quality and reduce rework by 20-40%
- Improved point productivity by 30-50%
- Reduced lead-time by 15-20%
- Adopt solutions with RoI in the range of 30-40%
- Ease of design modifications and reuse
- Enables 'Design anywhere, Build anywhere'

The Digital Engineering framework brings in the following improvement opportunities by leveraging CAx in the PLM environment to address the common issues:

Reduce design errors	<ul style="list-style-type: none"> • 'Best Practices' embedded in design creation/ modification • Continuous design verification against specifications
Improve productivity	<ul style="list-style-type: none"> • Automate repetitive & error-prone activities • Use idle time of tools for iterative/ time-consuming tasks
Shorten lead-time	<ul style="list-style-type: none"> • Reduce need for human intervention and waiting time • Use waiting time during job transits to progress the work
Support innovation	<ul style="list-style-type: none"> • Leverage knowledge based intelligence • Provide predictive analytics for early design validation

Solution Competencies

Engineering domains

- Product design and detailing
- Analysis: CAE and CFD
- NC, tooling and manufacturing planning
- Product documentation

Industry verticals

- Aerospace
- Automotive
- Construction
- Consumer Goods
- Industrial Equipment

CAx technologies

- CAD: CATIA, UG/NX, Pro/ENGINEER, SolidWorks
- Other tools: PDM/ PLM, CAM, CAE, EDA

The Geometric Advantage

Digital Engineering experience




- Over 20 years of experience in technology development
- Innovative point productivity products and patented technologies developed on CAx tools
- Long standing strategic relationships with all major CAx ISVs

Process-driven approach

- A systematic approach consisting of a phased methodology spanning from study of existing processes, identification of process improvement opportunities, and solution definition, aided by solution development, deployment and support
- Solutions based on common learning from experience in engineering domain and development of software tools/ technologies to support engineering requirements
- Use of automation best-practices abstracted from implementations for various manufacturing OEMs

Tools and Assets

Solutions supported by consulting tools and continuous improvement techniques. The various tools and assets used are as follows,

Process components	Tools and assets
Process modeling	<ul style="list-style-type: none"> • IDEF0 • Process Flow Diagrams (PFD) 
Process improvement	<ul style="list-style-type: none"> • Value Stream Map (VSM) • Root cause analysis 
Solution definition	<ul style="list-style-type: none"> • Automation best practices • Feature connectivity • Verification-commitment analysis 

Contact Us

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About Geometric

Geometric is a specialist in the domain of engineering solutions, services and technologies. Its portfolio of Global Engineering services and Digital Technology solutions for Product Lifecycle Management (PLM) enables companies to formulate, implement, and execute global engineering and manufacturing strategies aimed at achieving greater efficiencies in product realization.

Headquartered in Mumbai, India, Geometric was incorporated in 1994 and is listed on the Bombay and National Stock Exchanges. The company recorded consolidated revenues of Rupees 4.86 billion (US Dollars 121.6 million) for the year ended March 2008. It employs close to 3000 people across 10 global delivery locations in the US, France, Romania, India, and China. Geometric is assessed at SEI CMMI Level 5 for its software services and ISO 9001:2000 certified for engineering operations. For further details, please visit www.geometricglobal.com.

