

## SMARTTEAM Version 5

*Allows data sharing and use of PDM capabilities from any system*



# Product Lifecycle Management

Product Lifecycle Management (PLM) is a powerful IBM e-business on demand enabler. It facilitates a strategic approach to creating and managing a company's product-related intellectual capital, from initial conception to retirement.

PLM improves the efficiency of product development processes and a company's capacity to use product-related information. This enables companies to make better business decisions and deliver greater value to customers. It also allows collaboration across organisational and geographic boundaries, to improve supply chain communication, business process efficiency, and the ability to innovate.

Built on open industry-leading IBM middleware standards, PLM solution set components fit within any IT architecture to maximise the value of existing technical environments. The PLM solution set combines consulting, applications, services and infrastructure components to make a company's core business run smarter, smoother and faster.

## **A formidable combination**

By combining its integrated portfolio of PLM software, market-leading hardware and world-class consulting and services, IBM delivers the most comprehensive PLM solution for any business.

As the world leader in providing e-business solutions, IBM has been at the forefront of serving the needs of small and medium-sized businesses, as well as top Fortune 500 companies, for more than 21 years. The key to this success has been its ongoing strategic partnership with Dassault Systèmes, the developer of CATIA<sup>™</sup>, ENOVIA<sup>™</sup>, SMARTEAM<sup>™</sup> and DELMIA<sup>™</sup> – the products that lie at the heart of the IBM PLM solution set.

[ibm.com/smarteam](http://ibm.com/smarteam)



### **More than technology**

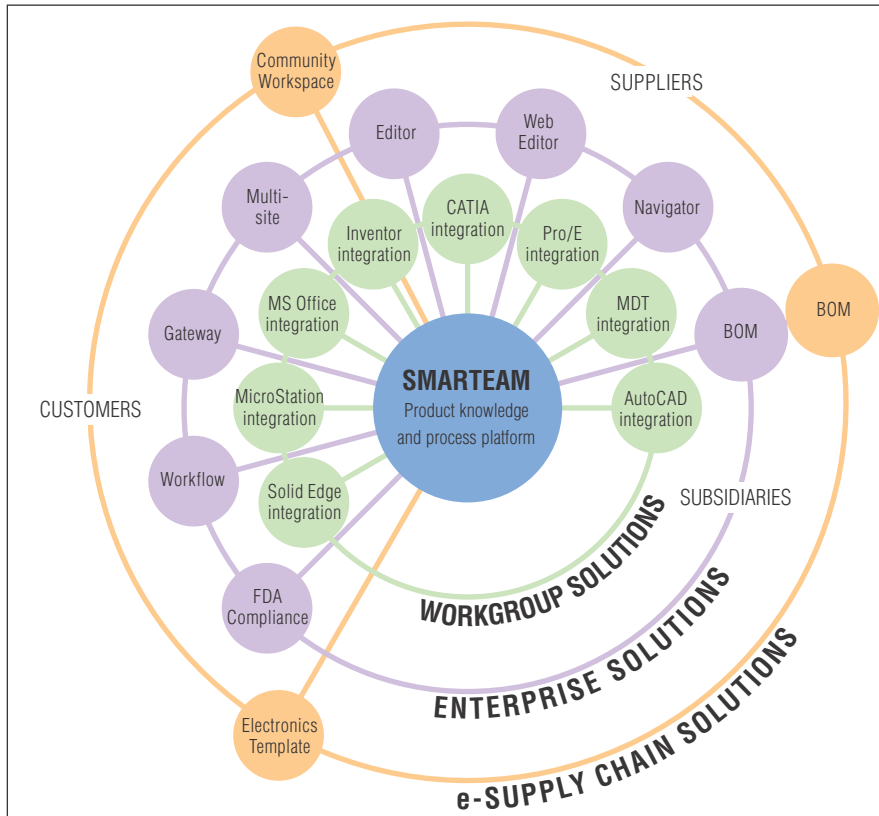
Using the collaborative power of the Internet, the PLM solution set allows organisations to make a quantum leap in innovative product design. It achieves this by reducing cycle times, streamlining development windows and cutting production costs all at the same time. PLM solutions optimise the product lifecycle environment and end-to-end processes with the help of the e-business and PLM technology and consulting services expertise of IBM, or its Business Partners.

To help realise the benefits of PLM, IBM also provides implementation, integration and operational support services, which include application management and business process outsourcing. To further underpin the PLM solution set, IBM can also add its industry-leading portfolio of hardware and services to your infrastructure. IBM @server<sup>®</sup> and storage solutions, as well as middleware like WebSphere<sup>®</sup>, WBI and DB2<sup>®</sup>, can all be used as mission-critical components of a tailored PLM solution.

Like other IBM e-business on demand offerings, the PLM solution set links enterprise technology islands into a powerful network for nurturing new ideas. It breaks down the silos between different companies within your value chain, increasing the rate of information exchange and interaction between the people who drive a business forward.

# SMARTEAM solutions

## Cutting-edge product lifecycle collaboration solutions



SMARTEAM: Powering product lifecycle collaboration

Rapidly implemented, scalable, customisable, and uniquely cost-effective, SMARTEAM provides best-in-class product lifecycle collaboration solutions for product teams in the extended enterprise and across the supply chain. SMARTEAM addresses unique industry needs in Fabrication and Assembly (F&A), Electronics, Consumer Goods, Automotive and Aerospace, Life Sciences, and Power

and Process, helping companies improve innovation and product quality, reduce costs and time to market, and comply with industry standards. SMARTEAM provides pre-defined business templates, efficient customisation tools, and an intuitive, user-friendly interface, enabling companies to reduce the learning curve involved at each project stage and generate results quickly, resulting in an exceptionally rapid Return On Investment (ROI).

Leveraging robust and open technologies, SMARTEAM solutions integrate enterprises on multiple levels:

- Information Integration**  
*SMARTEAM solutions capture intellectual property at its source from CAD design, manufacturing and maintenance, drive the product information across the extended enterprise, and enable its use in other enterprise applications.*
- Process Integration**  
*SMARTEAM solutions establish and maintain vital corporate best practices and leverage subject matter experts across the extended enterprise, leading to better, more efficient decisions and processes.*
- Organisational and Business Integration**  
*SMARTEAM solutions standardise work methods and create synergy across departments, multiple enterprise sites, suppliers and customers. This synergy across the product lifecycle optimises design and sourcing, Bill of Materials management, standards compliance, and more. SMARTEAM drives product knowledge and processes across the enterprise, empowering the organisation with a wide array of best practices and substantial bottom-line benefits.*

# SMARTTEAM value proposition

SMARTTEAM drives product knowledge and processes across the enterprise, empowering the organisation with a wide array of best practices and substantial bottom-line benefits.

## Collaborative Document and Design Management

SMARTTEAM provides comprehensive security, control, and revision management over all types of product data, creating document links and structure management (full assembly and drawing hierarchy support), bi-directional drawing attribute mapping and automatic data synchronization, automatic tracking of 'Where Used' and 'Composed of' relationships, and reference maintenance.

- **'In-Process' methodology** – Empowers users to manage, create, edit, and annotate multi-CAD designs, assembly structures, and other related documents, including Office-type, from directly within the CAD environment.
- **Robust Query Mechanism** – Provides advanced, complex full text search capability, searches on files in the vaults and meta-data in the single database repository – all through Windows or via Web browser access.

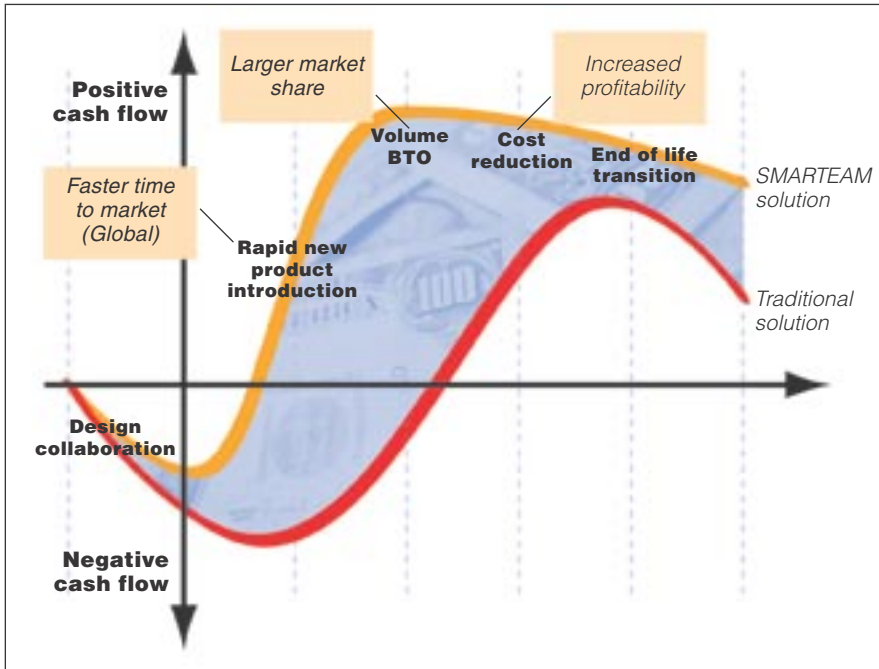
- **Visualization** – Supports over 200 native 2D and 3D CAD, Office and raster file formats, multiple user redlining options, and enhanced printing and manipulation tools, including sectioning, mass properties, measurements, bird's eye, and more.

## Automated Workflow and Change Management

Project workflow management includes automatic project status tracking and work routing from one stage to the next, expediting engineering change processes, including process templates for ECR, ECO, ECP, MCO, and more. SMARTTEAM's robust process mapping capabilities enable companies to easily establish and automate best practices, with instant bottom line benefits.

## Bill of Materials Management and Collaboration

Powerful BOM functionality includes easy BOM creation from the CAD structure, management and comparison of various BOM structures, Engineering Change Orders on the BOM, a BOM WhiteBoard 'sandbox' environment, and BOM synchronisation with ERP. SMARTTEAM's unique Briefcase capabilities facilitate 'zero-footprint' BOM collaboration with customers and suppliers, enabling companies to keep their value chain information sources undisclosed.



SMARTTEAM bottom line: improved ROI

the implementation of industry-specific, collaborative best practice methodologies and optimized business processes. SMARTTEAM drives efficient work and collaboration in many areas, including:

- **Design Management** – SMARTTEAM facilitates efficient multi-CAD data management and cutting edge design collaboration, maximising innovation potential and reducing cycle time
- **Business Process and Change Management** – SMARTTEAM streamlines the change management process, standards compliance and other critical processes, reducing bottlenecks to speed productivity and harnessing expertise to ease decision making
- **Product Structure Management** – SMARTTEAM ensures that – at any point in the product lifecycle – users reference only the most accurate Bill of Material (BOM) requirements, structures and configurations.

Delivered with detailed scenarios, embedded AVIs, suggestions for optimal data model structure and preferences, and sample scripts, SMARTTEAM methodologies include best practices for F&A, collaborative design, and using SMARTTEAM with different CADs. Business processes cover bidding, process and delivery, shipping, ECOs, BTO/ETO, and other specific needs across different industries.

### Links Management

Integration links, object and structural effectivity, and reference designators facilitate complex product development.

### Value Chain Collaboration

- Unique Briefcase tool for easy collaboration on BOM and related data (assemblies, Bills of Material, documents, images, etc.)
- Secure project community portals for online collaboration
- Gateway capability, for seamless linking to EAI platforms and applications.

### Standards Compliance

SMARTTEAM compliance tools include a features-rich password security mechanism, an advanced Audit Trail, electronic signatures, and flexible workflow functionality. These tools facilitate compliance with US Food and Drug Administration (FDA) regulations, ISO 900x, and other industry standards.

### Business Process Solutions

SMARTTEAM's product lifecycle collaboration platform addresses the needs encountered in today's complex business and product development environment. By integrating the latest product data across engineering design, manufacturing logistics, customer service and other enterprise departments, SMARTTEAM facilitates

# SMARTEAM for industries

SMARTEAM leverages the experience of over 2,600 leading manufacturers and the expertise of its field engineers and consultants to address a broad spectrum of industry-specific business needs and provide best practice methodologies, templates and applications that address roles typical to different industries:

- **Fabrication and Assembly (including Consumer Packaged Goods)**

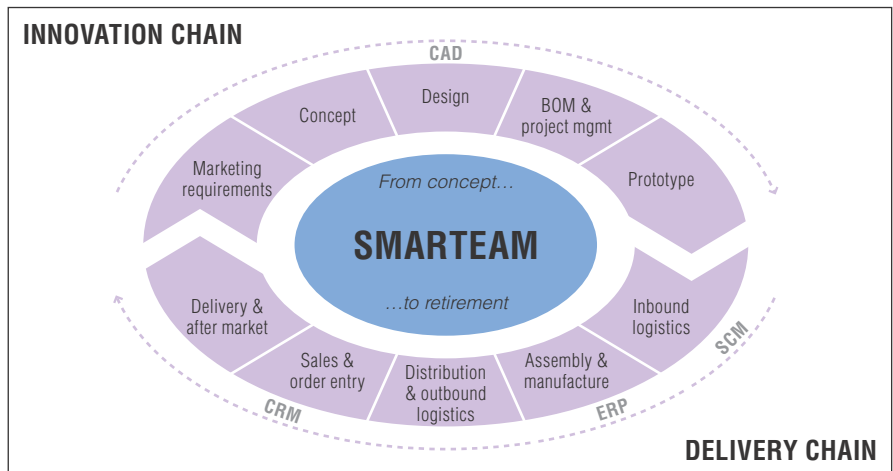
SMARTEAM facilitates effective access to and reuse of product knowledge, through workflows and project documentation management, for increased market share and profitability. SMARTEAM's F&A methodology guide covers the entire lifecycle process, from bidding, and process and delivery, through to shipping and after-sales, provided through detailed scenarios, embedded AVIs, suggested data model structures, and sample scripts.

- **Machinery and Mobile Equipment**

SMARTEAM facilitates the efficient reuse of proprietary knowledge throughout the product lifecycle, from project specification through bidding and inventory management.

- **Industrial Component and Equipment (including Process, Power, and Discrete Manufacturing)**

SMARTEAM improves responsiveness to customers, providing timely, efficient responses to RFPs and facilitating the order fulfillment process.



Capturing and leveraging product information throughout the lifecycle

- **Global Design and Manufacturing**

SMARTEAM compresses design and cycle times, enabling a quick reaction to market changes and facilitating the ability to bring the right product to market, at the right time.

- **Electronics**

SMARTEAM manages the mix of mechanical, electronic and software components required in today's market. With its Web collaboration and knowledge transfer tools, SMARTEAM enables close work with suppliers and customers, helping OEMs produce products and reduce turnaround time and helping suppliers win bids by meeting targets for price, function and availability.

- **Automotive and Aerospace**

SMARTEAM enables OEMs to share collective product knowledge and collaborate dynamically with suppliers, sub-contractors, distributors, customers and others that influence a product's lifecycle, compressing production lifecycles and enhancing product value.

- **Process Industry and Life Sciences**

SMARTEAM provides templates and processes for optimising collaborative product development, bidding, ECO management, ETO/BTO execution, and for achieving industry compliance.

SMARTEAM has the templates, processes and expertise to help an organisation meet its lifecycle management needs effectively. Best practices in key areas such as collaborative product development, bidding processes, ECO management and product change traceability play an important role in the product lifecycle across virtually every industry. SMARTEAM's combination of innovative technology and the ability to adapt to a broad spectrum of industrial applications make it the right choice for a product development strategy based on PLM solutions.



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