



How PLM Benefits Engineers

By Ed Miller
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Companies around the world are increasingly investing in Product Lifecycle Management (PLM) solutions. Investments in commercially available PLM-related software and services reached \$24.3 billion in 2007 and are forecast by CIMdata to continue their climb and exceed \$40 billion by 2012. Driving these investments is strong and growing executive-level awareness of the tremendous business value of PLM in saving time and cost while improving quality and facilitating greater innovation by leveraging information throughout the product lifecycle and bridging separate islands of automation. The positive impact on a company's bottom line savings and top-line revenue growth are staggering, and the business value of PLM has become increasingly visible in recent years. So in company executive teams, PLM is being seen as a competitive necessity.

People outside these executive groups may view PLM quite differently, however. Designers and engineers – as well as their supervisors and mid-level managers – usually have long-standing familiar methods for accomplishing their work, including various approaches for handling data, managing workflow, and tracking projects. So these engineering work teams sometime question the need for PLM at their level and may not immediately see the value of these solutions in their particular jobs.

In reality, however, PLM's proven productivity benefits for individual users are at the very foundation of the business value of the approach for the whole enterprise, where PLM solutions can save considerable time and effort compared to keeping critical data in desk drawers, spreadsheets, desktop hard-drives and other ad-hoc systems. Such manual ways of working often lead to headaches and delays in searching for the right files, correcting mistakes in using wrong versions, and wasting time recreating lost data.

By managing information in an organized, consistent manner, PLM provides access to a wide range of information that engineers otherwise might spend hours (or sometimes days) trying to find. This includes design files, engineering drawings, analysis results, and other information such as customer requirements from sales, machining capabilities from production, and component specifications from suppliers. In addition, PLM also provides a smooth way for information created by engineers to be used downstream by groups such as manufacturing and field service. In this way, PLM serves as a two-way conduit for information flow across the enterprise and throughout the product lifecycle. Different groups can readily share data, and data from one project can be easily retrieved and used on other projects.

For these reasons, individuals are starting to see the personal value of PLM and leading-edge companies are continuing to invest heavily in PLM solutions that allow people at all levels to work more efficiently at their jobs instead of spending unnecessary time and effort searching for information, reinventing the wheel, and fixing avoidable mistakes.

About PLM

CIMdata defines PLM as a strategic business approach that applies a consistent set of business solutions in support of the collaborative creation, management, dissemination, and use of product

definition information across the extended enterprise from concept to end of life—integrating people, processes, business systems, and information. PLM forms the product information backbone for a company and its extended enterprise.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding more than 25 years ago, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM enabling technologies.

CIMdata works with both industrial organizations and suppliers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through international conferences. CIMdata serves clients worldwide from locations in North America, Europe, and Asia Pacific.

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