



**PLM:
Improving Top Line
Performance of Industrial
Equipment Manufacturers**

A CIMdata White Paper

Product Lifecycle Management (PLM): Improving Top Line Performance of Industrial Equipment Manufacturers

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**Prepared by
CIMdata**

CIMdata[®]

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Product Lifecycle Management (PLM): Improving Top Line Performance of Industrial Equipment Manufacturers

The rules of engagement have changed. Traditionally, industrial equipment suppliers stood alone, competing to win. Today's global economy turned those rules upside down. Collaboration is the key to success, both within and outside your four walls. Where you once held your customers at arms length, you now work with them closer than ever. In fact, both your suppliers and customers are now your strategic partners. Former competitors are allies one day, adversaries the next. Most importantly, selling the same products in the same ways just does not cut it. You need new products and new services to grow your business, essential to survival in a market where consolidation seems to be the preferred growth strategy.

This CIMdata white paper focuses on how industrial equipment manufacturers – a varied group of suppliers to the energy, process, chemical/petrochemical, and the architecture, construction, and engineering (AEC) industries (please consider adding OEM – original equipment manufacturers) – can improve top line performance by adopting a product lifecycle management (PLM) strategic business approach. In today's global economy, industrial equipment suppliers are seeking a competitive edge to distinguish them and their products in a crowded, noisy marketplace. Your products and services are your intellectual assets, your main weapons in this competition. Effectively creating, maintaining, and redeploying these intellectual assets to meet customer requirements are key to winning this competition. This new competitive landscape demands collaboration. Information technology (IT) solutions must enable collaboration between diverse design groups, and support systems integration across your extended enterprise to help you effectively meet your customers' industrial equipment and mechanical, electrical, and plumbing (MEP) requirements. Adopting and implementing a PLM strategic business approach can help your organization meet these requirements and achieve top line benefits.

Framing the Market

The suppliers to the energy, process, chemical/petrochemical, and the AEC industries span a wide variety of industrial sectors, including: heating and ventilation; pipes, pumps, fittings, and valves; power generation and transmission equipment; boilers and combustion units; and fabricated metal products. According to the most recent U.S. Census of Manufacturers, each of these industrial sectors typically number in the hundreds of establishments nationally. On average, these firms have annual sales in the tens of millions. Each establishment averages less than 100 employees.

While they may be a mixed group with respect to their products and services, small firms like this do share some common information technology (IT) requirements. With tight budgets and few computing resources, they demand prepackaged solutions that limit implementation cost and risk. Beyond IT requirements, this group of suppliers also share many common issues because of the similar markets they serve.

Critical Business Issues

Industrial equipment suppliers are facing increasing global competition. According to data from the U.S. Department of Commerce, over the last five years more large construction projects were initiated overseas than in the U.S.

Industrial equipment firms need new products and services to survive.

Firms can improve top line performance by adopting a PLM strategic business approach.

Suppliers face increasing global competition, require participation in concurrent engineering, and must create more strategic alliances to survive.

“People spent large amounts of time finding and verifying information... Communication between the groups was slow and inefficient (and included) redundant work (that) wasted valuable time and was prone to error. Also, there was always the risk of using incorrect or outdated information.” Alec Gil, S&C Electric Company

Because many countries see civil engineering and construction as key to their economic development, they seek to promote development of local suppliers. Since it can be tough for U.S. firms to compete on price with these emerging competitors, they need to focus on their comparative strengths: engineering, quality, and service. Maximizing these strengths requires effective management of and access to your intellectual assets. Poor management leads to inefficiencies and waste. S&C Electric Company, a Chicago-based supplier of electric power switching and protection equipment, saw the failings in their product data management approach. According to Alec Gil, Manager of Engineering Systems, “the cumbersome way of keeping track of information in all these documents meant that people throughout the organization spent large amounts of time finding information, verifying its accuracy, and converting the data to a format they could use. Communication between the groups was slow and inefficient. Usually people would exchange paper documents and manually copy the data they needed. That kind of redundant work wasted valuable time and was prone to error. Also, there was always the risk of using incorrect or outdated information.”

Your ability to engineer complex solutions to order is most effective when you have control of your intellectual assets. Any new solution can quickly build on the most recent and accurate data from your last successful bid. You can build quality into your products – based on accurate product definition information and the latest manufacturing and testing results from your shop floor – not add it on at the end of the line. Finally, effective and timely service rests on a foundation of accurate product data. Service people need to know what configuration is in the field, what replacement parts and tools to bring on a service call, what service procedures to use, and how to test their results. This need for accurate data for service also extends to parts you may not service yourself. Owner/operators need more detailed product definition information to maintain and refurbish their facilities. Your ability to provide accurate information is crucial to building and maintaining long-term relationships with these important customers. Thus, to compete and win on your strengths in engineering, quality, and service you need to manage your intellectual assets effectively.

AEC projects have always been an enormous systems engineering task. Only recently have customers begun asking their suppliers to take a more active role in the engineering process. Concurrent engineering is common in other domains, like aerospace and automotive, and is becoming increasingly important to industrial equipment suppliers. Industrial equipment suppliers must respond quickly to outsourcing opportunities, including managing their own supply chains to develop a timely, winning proposal or quote. The RFP/RFQ process itself is crucial to success. Unfortunately, many firms do not understand their true costs, and they often don’t know if a particular bid will make money until the work is done (if even then). Part of this problem arises from lacking accurate product data from previous successful bids. You cannot accurately build a new bid without a strong data foundation. Understanding your true costs and being able to marshal your intellectual assets to respond to competitive bids quickly is a significant advantage.

While working collaboratively is a significant management challenge, it is also a technical one. Some equipment suppliers may use standard mechanical CAD systems to develop their pumps and valves, while piping and ducting suppliers may use design tools tailored to meet their demanding requirements. System suppliers must roll up and integrate all of this technical information to provide unified 2D and 3D views of their entire system offering. In fact, many industrial equipment suppliers must move from 2D into 3D CAD to meet requirements from up the supply chain. Participating in the concurrent engineering process

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requires working from a common base of up-to-date information about the evolving systems, and how those systems fit into the plant or facility. Thus, industrial equipment suppliers must address this multi-CAD problem within the context of a strong data management solution.

Over the last several years, the industrial equipment market has evolved. The competitive environment is increasingly requiring alliances and consolidation to survive, which only makes effective collaboration more important. Partners in such combinations must be able to merge their business processes and intellectual assets quickly and effectively to maximize returns on their collaboration. Again, this is a business issue, but one that must be supported by the appropriate enabling technologies. For example, Krebs Engineers, a US-based supplier recognized internationally for their expertise in the use of hydrocyclones for separating solids and liquids, must communicate between their Tucson, AZ headquarters, five worldwide subsidiaries, and their primary parts suppliers. They tried burning CDs, but these were outdated when mailed. Their challenge was to serve international markets using a common information infrastructure. What they really needed was a solution that could leverage the Internet to provide ready access to their intellectual assets, allowing users to view these assets without requiring the expensive authoring tools used to create them.

To thrive in this competitive marketplace, industrial equipment suppliers must improve their top line performance by developing innovative products and services. Adopting a PLM strategic business approach and supporting technologies can help them achieve this goal.

Defining PLM

In today's challenging global market, enterprises must innovate to survive and bring significant value to their shareholders, customers, and employees. It is important that this innovation occur in all dimensions—product, process, and organization—to improve competitiveness and overall business performance. Companies whose continuous innovation consistently results in right-to-market products and services can clearly differentiate themselves from their competitors, and can increase their market valuations.

Innovation can occur spontaneously in almost any situation, but continuous innovation requires an environment that nurtures collaboration and enables maximum leverage of the enterprise's intellectual assets. To attain this "environment for innovation," enterprises must be able to proactively capture, manage, and leverage their intellectual assets. Product Lifecycle Management (PLM) is the business strategy that best allows organizations to establish such an environment. 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.

CIMdata's world-class PLM model, as shown in the figure below, includes a range of PLM-enabling technologies. Foundation technologies provide the infrastructure to implement PLM, including security and administration functions required to define user privileges and protect your information. Enterprise application integration technologies help tie your PLM solution to other enterprise applications, such as enterprise resource planning (ERP). Communication, collaboration, and visualization/digital mockup (DMU) technologies are central to enabling collaboration across your extended enterprise. PLM core functions include your data authoring tools, and the data

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CIMdata's PLM model definition includes a variety of product data authoring tools, such as mechanical computer-aided design (CAD), electronic design automation (EDA), computer-aided software engineering (CASE), computer-aided process engineering (CAPE), manufacturing process management (MPM), and digital manufacturing.

management functions, such as vaulting, product structure, and classification management that help you leverage your intellectual assets most effectively. CIMdata's PLM model definition includes a variety of product data authoring tools, such as mechanical computer-aided design (CAD), electronic design



CIMdata's World-Class PLM Model

automation (EDA), computer-aided software engineering (CASE), computer-aided process engineering (CAPE), manufacturing process management (MPM), and digital manufacturing.

Program management functionality helps you plan and control your work at the macro level, and workflow helps take that work, and the necessary supporting data, to the appropriate staff anywhere within your extended enterprise. Finally, application and business solutions combine these foundation technologies and core functions to provide packaged solutions for common business problems, such as engineering change management and sourcing.

While technology is central to a PLM approach, it is only the effective application of appropriate PLM-enabling technologies to well defined business processes that can help organizations achieve their PLM goals. The PLM strategic approach helps enterprises reduce costs, improve quality, and shorten time to market by enabling innovation in their products, services, and business operations. The core PLM concepts include:

- Enabling the accurate capture of product definition information, at the point and time of creation, including the processes required for manufacturing, support, and maintenance
- Providing universal, secure, and managed access and use of product definition information
- Maintaining the integrity of that product definition and related information throughout the life of the product, independent of product type, from concept to end of life
- Helping organizations define, manage, and maintain business processes used to create, manage, change, disseminate, share, and use the information.

The common thread across these concepts is ensuring the effective capture, management, and leveraging of intellectual assets across the extended

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enterprise, including its partners, suppliers, and customers. Intellectual assets include all the components of the enterprise's product and process definition, i.e., all mechanical, electronic, software, and documentation components, as well as all business and manufacturing process definitions within the scope of the lifecycle. PLM provides an enterprise digital infrastructure for intellectual assets, an information backbone for creating and delivering innovative products and services, one that ensures that accurate product definition information is available at the right time, to the right people, and in the right context. When integrated with other business systems, PLM-enabling solutions ensure that up-to-date information flows on time to users in all areas of a business. With the needed intellectual assets at their fingertips, PLM enables collaborative work environments that bring together expertise from multiple organizations, digital workspaces where people can develop new, innovative products and services, and design and establish innovative business, manufacturing, and support processes. This combination of product and process innovation improves top line performance, bottom line profits, and increase customer satisfaction.

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How PLM Solutions Can Improve Top Line Performance

Effective PLM implementations can dramatically shorten the product development cycle, effectively increasing your product development capacity. In our industrial consulting work with end user companies, CIMdata developed a benefits appraisal model that helps document these top line performance improvements. Based on our experience using this model during PLM technology selection and implementation, efficiency gains in information access, review cycles, and engineering change (both number of changes and cycle time) during development can reduce overall product development cycle time by 15-25%, freeing development resources to focus on innovation, not fire fighting.

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The ability to develop more rapid and accurate responses to sourcing opportunities can increase your percentage of winning bids, adding to your revenue. Accurate product definition information is central to the RFP/RFQ process. When you manage your intellectual assets using a PLM-enabling solution, you can focus your energies on competing on your strengths: engineering, quality, and service. Using these solutions, the right configuration of your current products is instantly available, either to sell or upon which to base a new design. This capability empowers your sales and engineering functions to more effectively meet customer requirements. For example, Krebs Engineers receive an average of twenty-eight purchase orders (POs) per day, as well as ten to twenty engineering change orders (ECOs) on existing designs. Responding to these orders requires access to thousands of drawings and support documents. "Delays in getting back to customers in this manual system undoubtedly cost us business, said Mark Holmberg, Engineering Manager. Their PLM solution helps Krebs Engineers process ECOs twice as fast. Sales representatives can retrieve information and fill orders more quickly, a critical need since 50% of Krebs' business is in replacement parts. "The capability to speed workflow will enable us to respond faster to our customers," says Stuart Sandler, Director of Information Services, "and that will definitely translate into increased sales."

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Using this information foundation also reduces purchasing and manufacturing glitches, and helps you build in quality, within your planned schedule and budget. Of course, PLM-enabling solutions can take the bidding process much further. Once firms make the decision to move from 2D to 3D CAD, even more benefits become feasible. Digital mockup (DMU) technologies can combine 3D models from disparate CAD systems into one model, illustrating potential design and manufacturing issues before cutting any metal. This technology alone can improve collaboration in the design supply chain significantly.

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PLM solutions can provide integrated collaboration technologies that help the geographically dispersed sites in your extended enterprise work together, both synchronously and asynchronously, maximizing the benefits from the skills each site has to offer.

However, this is only the beginning. Many companies currently use PLM solutions to configure alternatives, test their function using simulation, develop manufacturing cost and process information using digital manufacturing technologies, and then build this intelligence into their quoting process. Some firms even include the 3D models and simulations in their quotes to prove their approach and, often, clinch the deal.

Industrial equipment manufacturers produce key components in long-lived assets, like factories, power plants, and processing facilities. Keeping these operations running at optimal efficiency is critical for owner/operators. This requirement makes Prompt After Sales Service (PASS) essential in the industrial equipment marketplace. PLM solutions can enable the intelligent corporate knowledge/product databases necessary to support advanced service offerings. As described earlier, product structure management is a core PLM function, one that allows you to manage and link all of the interrelated information about your product. Because your product may change from design, to manufacturing, and into installation, your PLM solution must support capturing and managing this evolving information. To meet this requirement, PLM solutions must enable data management that synchronizes four versions of your product record: the as-designed, the as-built, the as-installed, and the as-maintained.

1. Over the last fifteen years, PLM solutions, and the product data management (PDM) systems that came before them, were created to manage the as-designed product record. Tight linkages with product authoring tools, like MCAD and EDA, kept this information current and well-defined release processes ensured that manufacturing got the right information.
2. Currently, as-built records are typically the domain of ERP systems. Due to manufacturing problems, part shortages, and other problems, what you design is often not what you build in your plant. You must define your manufacturing processes to capture any deviations from the as-designed configuration, so that you know what is in the product you shipped out the door. This as-built record is crucial to support downstream processes.
3. Keeping as-installed records accurate and up-to-date requires a solution that includes both PLM technologies and effective business processes. While some ERP systems can support this function, PLM solutions can better handle the dynamic nature of the installation process. Some organizations are using innovative technologies, such as portable and handheld computers to support capturing data during the installation process. Having accurate as-installed configurations is essential to prompt service; without them, field technicians may not be adequately prepared to address the owner/operators pressing business issues, making PASS impossible.
4. It is also important that your PLM technologies and business processes close the loop by updating the as-maintained product record to ensure that the next service call can be just as prompt and effective.

Finally, PLM solutions can enable and enhance your global presence. Most solutions use the Internet as a virtual global computing platform. Having this common PLM infrastructure makes your intellectual assets instantly available to customers and partners worldwide. Today's PLM solutions emerged from a heterogeneous computing and design environment; they are engineered to support different data formats and business processes. As part of a complex supply chain using multiple CAD and design tool formats, you need PLM technologies like view/markup and DMU that make this data work for you without costly, time consuming, and error prone data conversion and reentry. PLM solutions can provide integrated collaboration technologies that help the geographically dispersed sites in your extended enterprise work together, both

synchronously and asynchronously, maximizing the benefits from the skills each site has to offer. The strong workflow management capabilities inherent in most solutions allow you to quickly define and implement common business processes tied to the PLM-managed product record. In combination, these PLM technologies can support your business processes and make this virtual presence real for your partners, suppliers, and customers worldwide.

What Companies Are Saying About PLM

According to Alec Gil, Manager of Engineering Systems at S&C Electric, the way to address intellectual asset management problems is by using a collaborative product data management system. These systems enable companies to get their enterprise under digital control by capturing information in computer-based systems and exchanging it electronically between groups and facilities. “Previously, these paper documents were stuffed in desk drawers or left forgotten in file cabinets,” said Gil. “By capturing this critical information, we’ll have a valuable historical record for each product throughout the product lifecycle so we can see where we stand and also don’t need to re-invent the wheel on subsequent projects. People throughout the enterprise can use collaborative PDM in this manner, engineers as well as those on the shop floor, sales, field service, marketing, and procurement.”

Aker Kvearner, a leading global provider of engineering and construction services, technology products, and integrated solutions, sees the benefits of information integration and access. Their diverse systems all produced parts of the product definition, making it hard to share information. Morten Bråss, vice president of engineering at Kvearner Oil Products (KOP) division, “wanted engineering data to work along side our other business information. We had all these systems creating supposed knowledge, but they weren’t talking to each other. A piece of the jigsaw was missing...Every project is individual, but it’s fair to say that there was a lot more scope for global sharing of information and standardization than was possible (without using a PLM solution).” This information management “pain” is one PLM technologies are uniquely suited to address. Bråss adds that operations and maintenance increasingly need access to legacy information.

KOP expects benefits from their PLM solution at every stage, from global collaboration on project bids, to their subsequent execution, operation, and maintenance. KOP plans to extend their PLM solution to all departments, from sales managing quotes and documentation, to engineering, publishing, manufacturing, and other functions. “Some returns are quantifiable, some are not,” Bråss says. “Everyone will be able to find information – drawings, documents, engineering data – far more quickly...If something happens offshore, time is money and information is needed fast.”

Internally, it is about time savings and improved accuracy – and automatically satisfying the ERP systems’ information requirements in terms of materials, purchasing, and subcontractor management. According to Bråss, design re-use and rationalization will allow KOP to modify and reconfigure existing components, such as specialist valves, instead of developing them from the ground-up. This is a big win for the company. “Effectively, we will be able to save whole 3D models at a macro level and at a micro level all the way through their evolution,” he says. This library of models provides a very powerful starting place for standardization.

In the old system at Krebs Engineers, parts information was sent from engineering to manufacturing manually. Staff members manually entered the same bill of material (BOM) information on five separate forms, lists, spreadsheets, drawings, and reports. According to Mark Holmberg, Engineering

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Their new PDM solution will interface directly with their enterprise resource planning (ERP) system and eliminate the need for manual data re-entry. This approach ties their operation together, providing a single data source from design through fabrication. Holmberg of Krebs Engineers believes this will improve BOM accuracy while using less staff resources to create and manage it.

Manager, “This is frustrating and nuts, wasting days of time and risking incorrect or out-dated information being entered.” Their new PDM solution will interface directly with their ERP system and eliminate the need for manual data re-entry. This approach ties their operation together, providing a single data source from design through fabrication. Holmberg believes this will improve BOM accuracy while using less staff resources to create and manage it.

Farnham and Pfile, an engineering and construction company, sees the downstream benefits of this technology. “From a maintenance standpoint, if someone in the field needs a manual, they now have the information at their fingertips instead of calling the engineering department,” said Todd Vander Hill, a CAD Engineering Specialist. “Using the old school method, contractors would produce maintenance manuals for the customer, as many as 30 volumes, 3-4 inches thick, that were soon out of date. Using digital mock-up and reviewing tools, the commissioning data is digitally available and other information is always current, always online...Animated instructions can be included to demonstrate procedures, such as how to properly change a slurry pump impeller or a set of screen decks.” According to Greg Yates, F&P’s Senior Proposal Manager, “The information that we have included in that package is the manufacturer’s recommended guidelines...All of the reference materials are customizable — whatever the operator wants to see.” Another interesting aspect of the program is the preventative maintenance (PM) scheduling. The history of each piece of equipment can be stored for the mechanics. “It can be as interactive as the customer wants,” Vander Hill said. “One company may want to protect access, while another might give mechanics the freedom to input additional information and customize certain parameters.”

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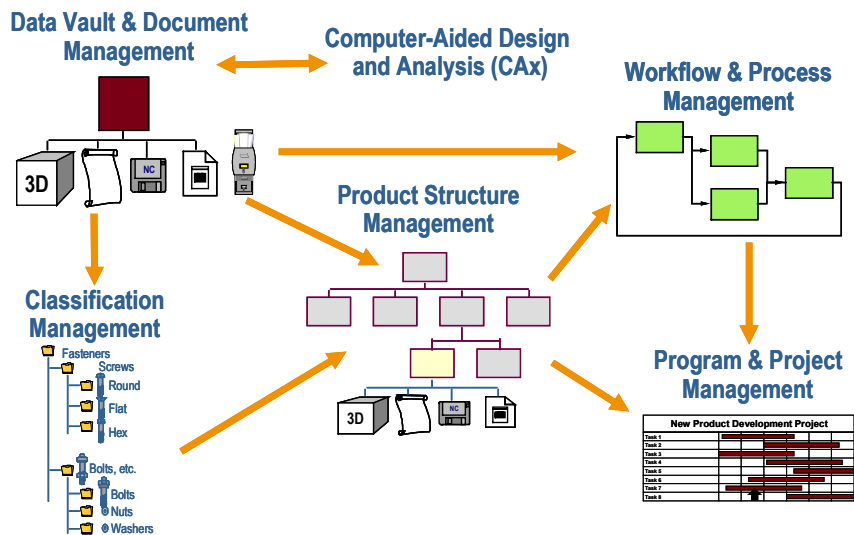
The software also changed Farnham & Pfile’s relationship with the customer. A project still starts with a negotiated design and construction. When construction is complete, the relationship now continues with an online system helps bring new plants online quickly, reducing piping costs by up to 30%.

These comments illustrate what industrial equipment manufacturers and their customers can achieve by adopting a PLM strategic business approach. How can your company start seeing some of these benefits?

Getting Started with PLM

In today’s challenging economy, industrial equipment manufacturers and most

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Different Implementation Sequences for PLM Core Functions

other firms have tightened their information technology (IT) budgets, reducing available computing resources. When adopting new technology, like PLM, firms demand pre-packaged solutions that limit implementation costs and risks. As described in CIMdata's world-class PLM model, vendors develop applications and business solutions that help do just that. They provide some combination of data structure and business processes tailored to meet specific user and domain requirements. As such, these applications and business solutions build upon the PLM core functions illustrated in the figure below.

Core to getting started with PLM is getting your data into the system. The Data Vault core function will manage many types of vital data, including 2D and 3D data, text files, graphics, spreadsheets, and many others. In many PLM systems, this data is vaulted and accessed through an integration between the PLM solution and the specific authoring tool, including Computer-Aided Design and Analysis (CAx) tools. While authoring tool integrations are not essential in early implementation, they can help users avoid data reentry and validation errors by taking the data management process out of their hands and providing on-line access to all types of data. Since PLM solutions manage documents well as part of their Data Vaulting core function, most provide Document Management functionality.

Where you go next in the figure depends on which requirement or pain you want to address. Your business processes got you down? Move on to Workflow and Process Management to model, execute, and, most importantly, improve your key business processes. Are your processes higher level, perhaps dealing with collaborative projects? Then move to the Program and Project Management core function, defining project tasks and then ensuring their execution by designing supporting workflows.

Many organizations quickly move to define and manage product structure, an essential foundation for engineering change management, an issue that often drives many companies to get into PLM in the first place. Reducing change volume and cycle time can result in huge cost and product development cycle time improvements. Firms seeking top line benefits have to use and reuse their product structures, tailored for each new project. The Product Structure Management functionality in most PLM solutions is designed to support such reuse. Once the structure is in place, you can add Classification Management functions, analyzing your current products and development processes to define classes of standard parts and assemblies. With these in place, your staff can quickly define and configure new products using standard building blocks. Using this data, many organizations build "product configurators" that put configuration tools in the hands of sales people, purchasing people, and even customers.

While implementing a PLM strategic business approach seems like an overwhelming task, it should not be a "big bang" event. Incremental changes tend to be more effective. CIMdata recommends that firms should "think and architect big, but implement small." You want your PLM vision and mission to identify what is possible, and then define small steps along the way that keep you heading toward that vision. New users can be successful adopting the core functions, applications, and business solutions through small pilot projects designed to display how the PLM solution can solve a pressing business issue. Using appropriate metrics will help you gage the effectiveness of each new function, while maintaining a quantitative focus on achieving the overall vision.

One last statement about getting started. As part of CIMdata's end-user consulting, we often help organizations develop a benefits appraisal model that clarifies the costs and benefits of implementing a PLM strategic business approach. One key metric we develop as part of this model is "opportunity cost per month for not implementing PLM." Depending on the client, these figures

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typically range from the tens to the hundreds of thousands of dollars per month. Can you afford not to consider PLM?

Based on the results to date, it is clear that adopting a PLM business approach is a necessity to compete and win in today's global marketplace.

Conclusion

In today's competitive global markets, industrial equipment suppliers face pressures from every direction. Effectively managing and deploying their intellectual assets is essential to meeting those pressures head on. PLM solutions can improve their top line performance, a true competitive edge. Leading companies are already reaping the benefits from adopting a PLM business approach, providing credible results and proving out the technology for broader application. Based on the results to date, it is clear that adopting a PLM business approach is a necessity to compete and win in today's global marketplace.

About CIMdata

CIMdata, a leading and independent worldwide strategic consultancy, is dedicated to maximizing an enterprise's ability to design and deliver innovative products and services through the application of PLM solutions. CIMdata works with both industrial organizations and suppliers of technologies and services seeking competitive advantage in the global economy. CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM solutions. CIMdata helps industrial organizations establish effective PLM strategies, assists in the identification of requirements and selection of PLM technologies, helps organizations optimize their operational structure and processes to implement solutions, and assists in the deployment of these solutions.

In addition to consulting, CIMdata provides industry education through international conferences in the US, Europe, and Japan that focus on PLM. The company also conducts research, provides PLM-focused subscription services, and produces several commercial publications. CIMdata serves clients worldwide from locations in North America, Europe, and Asia Pacific. To learn more about CIMdata's services, visit our Website at 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.

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