Tech-Clarity

Tech-Clarity Insight:

Consolidating CAD

*The Benefits of a
Unified CAD Strategy*
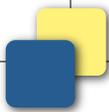
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*This summary is an abbreviated version of the report and does not contain the full content. A link to download the full report is available on the Tech-Clarity website, www.tech-clarity.com.

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Executive Overview

Manufacturers must remain vigilant about managing cost in today's uncertain economic times. Lean IT organizations and budgets lead many to consider the benefits of rationalizing their software systems. One system that manufacturers should consider standardizing is Computer Aided Design (CAD). Even in the best of times, manufacturers should consider standardizing on a single CAD solution. Cost savings are attractive and are certainly attainable through consolidation. Beyond cost savings, though, are even greater strategic benefits.

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At the workgroup level, manufacturers can take advantage of better design collaboration and CAD model reuse. Broader benefits include the ability to share best practices across teams. The ability to unify product development processes and data across the enterprise is even more strategic. Common processes and centralized data are particularly advantageous as a part of a full system for product design and development that supports design, analysis, data management, product compliance, documentation, and other related innovation tools.

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At the highest level, standardizing CAD software offers corporate benefits. For example, a single CAD environment can enable a "design anywhere – build anywhere" strategy. This approach allows companies to rapidly adjust to market changes and resource shortages by offering the ability to transfer design or production to new facilities without concern for incompatible design data, tools, or processes.

From the IT perspective, consolidation provides the ability to focus resources on a smaller number of solutions. This reduces workload and cost and allows IT to provide a higher level of business support with today's lean organizations. Of course not all businesses have the opportunity to unify their CAD solutions due to customer and supplier constraints, but there are multiple advantages for those that can.

Conclusion

CAD consolidation and standardization have multiple benefits. The first that most think about is cost. That is a compelling benefit, but just one, tactical view. More strategic advantages include improved design reuse, collaboration, and sharing best practices. Corporate flexibility and agility are also important benefits, allowing manufacturers to shift work across the globe as available resources and market conditions dictate. Of course there may be reasons that may prevent companies from fully consolidating their CAD solutions, such as customer mandates to use specific tools. In these cases, a multi-CAD environment is required and must be supported. But the benefits clearly lean toward consolidation to improve time to market, reduce cost, and improve quality. "*Our common tool is the basic infrastructure that allows us to make quick decisions on product and plant locations*," Mr. Hoch summarizes, "*It provides management with the flexibility and agility they need*."

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Paul Hoch, Team Leader Product Engineering Services, Zumtobel AG

Recommendations

Based on industry experience and research for this report, Tech-Clarity offers the following recommendations:

- Understand the complete cost of operating multiple CAD systems
- Evaluate the opportunity to consolidate CAD systems to reduce cost, recognizing the multiple cost drivers go well beyond software license fees
- Consider the IT advantages of CAD consolidation, including improved business support and focus in addition to cost savings
- Ensure that engineers are enabled with a full-featured, scalable CAD tool that meets the needs of generalists and specialists alike
- Help workgroups collaborate and reuse by providing common processes and tools
- Enable a broader PLM approach, leveraging product development solutions that are integrated with a central CAD environment
- Enable corporate benefits and flexibility by creating an agile enterprise that can readily exchange work

About the Author

Jim Brown is the President of Tech-Clarity, an independent research and consulting firm that specializes in analyzing the business value of software technology and services. Jim has over 20 years of experience in software for the manufacturing industries. He has a broad background including roles in industry, management consulting, the software industry, and research. His experience spans enterprise applications including PLM, ERP, quality management, service lifecycle management, manufacturing, supply chain management, and more. Jim is passionate about improving product innovation, product development, and engineering performance through the use of software technology.

Jim is an experienced researcher, author, and public speaker and enjoys the opportunity to speak at conferences or anywhere he can engage with people with a passion to improve business performance through software technology.

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