
Introduction: The Need to Satisfy Changing Market Demands with Agility

Understanding the impact of a change across the organization – no matter how small – is key to ensuring your product’s success. In fact, innovation, agility and speed-to-market are critical competitive weapons in manufacturing today. Manufacturers must be able to rapidly introduce new products, update existing features, reduce costs and improve quality if they expect to maximize market opportunities. Those that do so while adeptly and effectively managing change will quickly meet evolving market needs with confidence.

"An efficient change process can cut up to 33% off the typical product development cycle time.”
McKinsey and Company

Challenges

As Ernst Fricke so wisely observed, “There is no engineering of successful systems without any changes; they are the rule and not the exception in product development.” This statement is even more true in today’s world of increasingly complex products.

Today’s products are more complex and often include mechanical, electrical, firmware, and software components that must all be digitally integrated and synchronized. This requires a great deal of collaboration across multiple groups in engineering, manufacturing, the supply chain and service. At the same time, demand for more customizable products with multiple options increases the number of product configurations, which adds additional dimensions to design changes.

Unfortunately, many companies are falling behind due to poor or manual change management processes. Requiring manual, paper sign-offs on changes makes it difficult to efficiently execute changes. Just as important, it complicates attempts to develop a comprehensive Digital Product Definition to gain a holistic product design. This in turn makes it challenging to understand the status and impact of a change across the product lifecycle. The result is that stakeholders are unable to confidently make critical decisions in a timely manner.
Implications

The effects of these challenges are felt in numerous ways, leaving manufacturers:

- Managing “open” changes for extended periods of time
- Dealing with multiple changes to fix issues
- Struggling to reduce scrap, eliminate rework and increase first-pass yield rates

PTC Solution: Enabling Effective Change Management Across the Product Lifecycle

Change management is a process that provides the traceability and governance of changes to a product’s configuration throughout its lifecycle. PTC’s Product Lifecycle Management (PLM) solution Windchill supports this process. As a result, manufacturers can make dynamic, fast-paced, coordinated changes throughout the product lifecycle while ensuring that all stakeholders are accessing the most up-to-date product information. Scalable, tailorable traceability throughout the product lifecycle is at the core of Windchill – ensuring better enterprise visibility, and faster and more accurate response to market pressure. Plus, unique change management notifications for CAD designers provide a link to requirements, allowing teams to make the right decisions based on the most up-to-date product data.

“Companies now recognize that better change processes can deliver top-line benefits... and are therefore developing change management with an eye towards improving speed to market.”

Aberdeen Group

Accelerate time to value

Manufacturers can ensure they quickly deploy and effectively use the PTC solution by taking advantage of the Value Ready Deployment for Change Management service.

Lifetime Products - The Impact of Change

Lifetime Products, Inc. is one company that now effectively handles change management by using PTC Windchill. This world leader in residential basketball equipment and polyethylene tables and chairs has more than 30 years of manufacturing experience. But its data management was paper-based, meaning no one had virtual access to a single source of data. One ramification was that product data changes led to time-consuming changes during 45-person face-to-face meetings.

With Windchill’s out-of-the-box capabilities, Lifetime Products has implemented standardized, digital, automated change management processes. Managing change digitally made it possible for over 400 PLM users and 50 CAD users to use a standard process, enabling enterprise collaboration across 15+ global teams. As Dave Winter, executive vice president engineering and manufacturing, Lifetime Products says, “At Lifetime we are very proud of our products and the impact they have on people’s lives. PTC Windchill helps us move these products rapidly from concept to production with standard processes and strong team collaboration.”
Benefits

Efficient, well-structured change management processes positively impact the competitiveness of manufacturers, suppliers, and their customers. The benefits extend from early product innovation through design, to service and support, allowing companies to:

• Improve product quality and safety
• Eliminate costly errors
• Reduce scrap and rework
• Eliminate confusion in manufacturing
• Synchronize support information with the latest product changes
• Provide an audit trail and traceability of design decisions

Ready to get started? Visit PTC.com/BOM today.