Enhanced Collaboration and Better Design Results

Discover how Aclara streamlines NPI with integrated PDM and PLM

Introduction

Founded in 1972 in Hazelwood, Missouri, Aclara Technologies is a world-class global supplier of smart infrastructure solutions to more than 780 water, gas, and electric utilities. The company creates smart meters, advanced metering infrastructure, and software that enable utilities to predict and quickly respond to all conditions.

Over the last decade, Aclara's booming business has scaled well beyond Missouri, with facilities established in Spain and the United Kingdom. But as the company expanded and its portfolio of new products grew, the challenges of managing new product introduction (NPI) processes became more complicated with data management risks introduced daily.

"Aclara has been an expanding company for the last 10 years with acquisitions of other companies and product lines," said Doug Frey, Quality Assurance Manager at Aclara. "This has led to a lot of integration challenges. Specifically, how new products are developed and introduced to the market."

The challenge

Aclara’s reliance on an on-premise PLM system had become detrimental to the company’s global growth. The total cost of ownership was proving to be a money pit, both in terms of the required hardware support and engineering man-hours needed to manage continuous software upgrades, updates, and security patches.

“Our company has multiple locations across the globe and we use contract manufacturers to produce our product,” explained Frey. “Therefore, we need to allow real-time direct access to the latest production data.” The keen quality manager knew the company desperately needed a robust way to manage product information efficiently and securely to facilitate synchronization across a globally dispersed supply chain.
The solution

Frey believed the best way to keep everyone on the same page and prevent potential errors, quality risks or bottlenecks was a proactive, holistic approach that allows stakeholders to oversee and manage the entire product lifecycle.

To ensure secure and efficient operations among internal and external teams – including engineers, operations, supply chain partners, and contract manufacturers – Aclara turned to Autodesk® for a solution that integrated Autodesk® Fusion Lifecycle cloud-based PLM with Autodesk® Vault product data management software. “With the Autodesk integrated solution, we are able to notify our contract manufacturers when changes are made by engineering and receive confirmation that they have received the change,” said Frey.

The integration of PDM with PLM provided Aclara the global enterprise-wide visibility and modern bill of materials (BOM) management capabilities needed to accelerate design cycles, lower costs, and keep costly product errors from slipping past quality control and shipping to market. The notification and coordination of product design changes is key to successfully controlling our supply chain, especially when not everyone is internal. We are able to monitor when suppliers acknowledge receipt of the changes, which then allows our operations department to direct them in implementation timing.”

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Another important reason Frey chose Autodesk over competing offers was the integration of PLM with PDM, which provided superior data protection over a standalone PLM system. “We wanted to protect our CAD data while being able to publish the drawings to our CMS. Our integration with Vault has allowed us to accomplish this,” explained Frey. “We are able to sync the Vault data with the item in Fusion Lifecycle to make sure the latest information is controlled and released together.”

The result

Aclara experienced an immediate return on investment, including improved collaboration and visibility across the supply chain team, more secure design processes, reduced risks, and the lower total cost of ownership typically offered by cloud.

“We wanted a cloud-based solution to eliminate the on-premise hardware maintenance and reduce the costs and time associated with implementing system upgrades,” said Frey. “This solution reduced our overall costs while being able to take advantage of the newest improvements without the cost and time to implement them.”

The integration of PDM with PLM provides global enterprise-wide visibility

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— Doug Frey
Quality Assurance Manager
Aclara Technologies

Image courtesy of Aclara Technologies.
Another advantage of the Autodesk solution was getting up-and-running in weeks compared to the many months routinely needed to setup competing on-premise solutions. Aclara worked with the Autodesk consulting team to develop the initial implementation. “Once the requirements were clearly defined, it was implemented quickly,” said Frey.

And once the solution was operational, the ease of use enabled immediate productivity from Aclara’s global product design team. “The Fusion Lifecycle user interface is much more intuitive than our previous solution, and the ability to configure and customize the workflows and workspaces to our needs allows us to use this solution while our business needs change in the future,” said Frey. “This was viewed as a big improvement.”

The integration of Fusion Lifecycle with Vault brings all the product development moving parts together into a single, integrated view, such as regulatory compliance, global monitoring, quality assurance, risk management and part nonconformance. Communication of actions taken by Aclara’s product team leaders prevents disjointed and duplicated efforts. According to Frey, the business value of such a powerful solution has been immeasurable.

“We are now expanding access to the solution across the organization, taking advantage of the user licenses we already have to add new workspaces and standardize processes across the organization,” offered Frey. “For example, we have added workspaces for corrective actions, non-conformances and audits. The integration has sparked a desire for a common approach to develop and control design documentation across the business, including multiple locations.”

Frey continued, “Fusion Lifecycle enhances our supply chain collaboration and information sharing, while Vault gives us faster and more accurate data analysis. Autodesk offers the best of both worlds, which really helps us optimize our global product introduction processes.”

The Fusion Lifecycle integration with Vault provides an easier view of the workflow state to track the progress of changes.

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Integrating Vault and Fusion Lifecycle enables bi-directional flow of data between PDM and PLM.