



## Existing System Cumbersome and Slow New PLM System Runs Like a Top and Easy to Use

### CLIENT

A global manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives in a solid leadership position worldwide.

### BASIC PROBLEM

Business users were having problems with the current product lifecycle management (PLM) applications and used it only when they had no other option. The client had purchased a custom tailored PLM software application for product cost management (PCM), and new product introduction (NPI), but the system was cumbersome to use, inflexible, and had performance issues. A new system was needed that would meet business, usability, technical and supportability requirements; and interface properly with several other systems (e.g., bill of materials - BOM - information was needed from TeamCenter and part cost information from another enterprise system).

### SOLUTION

Netra designed and built the new system with a Rich Internet Application (RIA) framework using .NET and Adobe Flex to ensure flexibility and usability. Security management and administration capabilities were designed to allow end-users to manage basic security requirements (e.g., roles and privileges) and lessen the burden on IT.

*“The system is very intuitive and I am amazed at the performance, especially considering the number of users and the complexity of some of our products.”*

Controller

In addition to replacing the existing capabilities mentioned above, Netra designed, implemented, and continues to support expanded PLM applications for advanced product quality planning (APQP), failure mode and effects analysis (FMEA), and parts compatibility management. Netra utilized a combination of on-site PM and Tech leads working with our offshore development and support teams in a highly cost-effective engagement model.

## RESULTS

The new PLM applications all met or exceeded the client's business, technical, and usability requirements. These applications are all web-based and globally-accessed with thousands of regular users (e.g., APQP has over 10,000 and PCM currently has 2,000 – 3,000 users) and usability is enhanced through advanced search and reporting capabilities.

Netra is continuing to support and enhance APQP, FMEA, NPI Workflow and PCM based on business needs. Key functionality has been demonstrated on mobile iOS platforms (iPad and iPhone) and we are currently planning to integrate all of these PLM applications via a RIA-based web portal architecture.

## VALUE PROPOSITION

- Netra's implementation approach utilized a combination of agile and waterfall methodologies as dictated by project specifics
- Expertise and experience across PLM and quality processes (e.g., PCM, APQP, FMEA) enabled a speedy and complete definition of the client's business requirements
- A high degree of team flexibility with resources capable of moving across projects as-needed
- High level of transparency to all stakeholders throughout the development process
- An engagement model that combined onsite leadership with offshore implementation resources for very cost effective solution delivery