



AMERICAN Cast Iron Pipe Company



AMERICAN
THE RIGHT WAY

Application modernization with a future vision

Headquartered in Birmingham, Alabama, AMERICAN Cast Iron Pipe Company employs approximately 2,600 people across plants in five states and in Brazil. AMERICAN manufactures a diverse line of iron and steel pipe, hydrants, valves and fixtures for water and wastewater, fire protection, mining, oil and gas, power and other industrial applications. While preparing to implement a new enterprise resource planning (ERP) system, an immediate need was identified for an updated rail car management application that worked independently but would also integrate into the new ERP system project once that was complete.

Successful transition from a legacy supplemental application to a stand-alone web-enabled application

AMERICAN was in the early stages of transitioning from an existing, 25-year-old, iSeries system to a more modern ERP system from Oracle. A member of the Ciber team with a long-standing relationship with AMERICAN helped identify that a component application of their legacy system used to manage its railyard was something the new ERP system wouldn't be able to accommodate without heavy application customization or changes to yard operations.

Neither were viable options, so Ciber was brought in to transform the existing application into a standalone version able to manage all activity along the 26 miles of railway

associated with the AMERICAN manufacturing plants. The company also wanted the development process and the final application to involve minimal disruption to daily operations.

Expertise guides the transformation from code to comprehension

The original Rail Car Application was a custom developed addition to the legacy iSeries solution targeted for replacement. To re-architect it into a stand-alone solution, the Ciber team had to delve deep into the code to identify all interfaces with other operational systems. After the initial project meeting, Ciber took the reins and fully analyzed the original programming. It turned out a number of process controls were enforced outside the actual application, which meant not all of the solution was embedded in the legacy code.

The Ciber team leveraged Ciber Momentum, a combination of business process discovery expertise and tool-enabled modernization process technology, to examine all code sources and extract the relevant functionality. From this, user stories summarized the use cases, representing 39 distinct business processes. The resulting use cases were verified by the client as part of scope confirmation. The Ciber team's ability to synthesize approximately 90% of the requirements from the legacy source code led to a highly efficient and effective use of the client's time, and delivery of AMERICAN's reengineered Rail Car Application was achieved in just under six months.

In moving the application from an iSeries environment to a modern architecture, the team had to consider implications impacting the user interface and data storage representations. It also had to support the future enhancement from a standalone application into a form which could easily interface with the inventory and purchasing aspects of the Oracle ERP system. The resultant solution was developed using Bootstrap, Web Forms, C#, IIS, and SQL Server with a web-based interface for user access.

A modern solution with integration flexibility

Ciber modernized the rail car application to a web-enabled platform while retaining the original functionality. Minor improvements simplified user interactions through use of features available in the new architecture. The new web-based interface leverages the company's internal skill set, requiring little user training and easily maintained. AMERICAN now has a modern, standalone solution for rail car management that extends the value of its original asset with minimal operational disruption. It will also integrate seamlessly once the new ERP system is fully implemented.

According to AMERICAN Director of Information Services, John Barnhart, "With the increased resource constraints that accompany a new ERP implementation across five divisions, the way Ciber was able to take the lead and determine what was needed to satisfy the rail car application requirements really made this project possible for us."

About Ciber

Ciber is a global IT consulting company with some 5,500 employees in North America, Europe and Asia/Pacific. Ciber partners with organizations to develop technology strategies and solutions that deliver tangible business value. Founded in 1974, the company trades on the New York Stock Exchange (NYSE: CBR). For more information, visit www.Ciber.com.