



IHB Railroad Partners with CTG to Accelerate Agile Redevelopment of Core Operating Application

The Client

The Indiana Harbor Belt Railroad (IHB) is the largest switch carrier in the U.S., with 54 miles of mainline track, 24 miles of which is double main track, and 266 miles of additional yard and siding track. The IHB provides a wide variety of services, including industrial switching with 160 customers, generating 170,000 carloads of business annually.

The Business Challenge

IHB has remained successful since 1907 through its ability to adapt and innovate. In 2020, the company's executive leadership team prioritized updating IT infrastructure and critical applications to modernize and enhance capabilities to sustain the company for years to come. IHB wanted to optimize processes, and ultimately, give customers more access to systems to enhance their overall experiences.

The company realized that CARS, its core operating application that was developed in the late 1980s, needed improvement. The end-to-end system was responsible for processing the 60,000 incoming and outgoing railcars that enter and leave the IHB ecosystem each month. CARS administered the company's central business of inbound and outbound tasks, such as managing offloading, onloading, and switching yards.

Updating the application as quickly as possible was critical, as it was becoming difficult to maintain the 31-year-old CARS platform. Decommissioning the old legacy application and replacing it with a modern Java-based solution became IHB's major 2020 IT focus.

The CTG Solution

IHB had begun redeveloping the CARS application internally, however, they needed assistance completing the project, building on the work that had already been done. The first and most critical step was a comprehensive audit of the current-state application, which revealed potential vulnerabilities, opportunities for improvement, and wider implications that updating the application would have across IHB's business. Based on the assessment, the CTG team managed a three-phased approach to completing the new CARS 2.0 application.

Phase One: Onboarding

This involved methodological and technical setup, in which CTG examined and became familiar with the code base, ultimately detecting multiple technical bugs. The team also set up the framework for the ultimate, future-proof application, built KPIs, and established a governance model that set up clear escalation paths and communications channels.

IN THEIR WORDS...

"CTG helped us rapidly transform our existing unfinished code base for CARS 2.0 into a complete, robust, and modern application. This will allow IHB to remain successful moving forward and provide our customers with enhanced experiences. The team's dedication and professionalism were outstanding throughout the project. We look forward to continuing our relationship with CTG in the future."

– Jim Wilson, Comptroller, Indiana Harbor Belt Railroad

IN THEIR WORDS...

“Being in the IT business for 37 years, CTG really impressed with this application assessment project. Thank you for all the hard work.”

– Jim Wilson, Comptroller, Indiana Harbor Belt Railroad

Phase Two: Product Roadmap

Given speed was of the essence, the team next focused on the tasks that could be completed quickly. Through comprehensive analysis, they determined what could be improved, and began scoping the Minimum Viable Product (MVP). Using CTG’s pragmatic Scrum Team as a Service delivery model and modern software development tools, they were able to quickly resolve bugs and implement quick wins.

Phase Three: Continuous Development

CTG embedded an Agile framework and DevOps principles into this project, which meant decisions could be made in almost real-time due to efficient communication lines. The new software was collaboratively tested with each Agile sprint, supported with live demos, and User Acceptance Testing (UAT) meant CTG could build and add new features during the development process.

Using their Global Delivery Center Network, CTG leveraged high-quality Testing, Analysis, and Agile resources from Belgium and Java skills from Luxembourg. This allowed the CTG team to deliver the MVP on schedule, along with technical and functional documentation.

Results

CTG delivered IHB’s new CARS 2.0 Java core operating application based on the unfinished, existing codebase. The application and development process exceeded IHB’s expectations. Highlights included:

- Delivering the application in under six months
- Achieving an “A” technical quality rating
- Seamlessly incorporating progressive insights into the MVP without a change management process

CTG’s partnership with IHB extends throughout 2021 to further bolster the application, including:

- Inclusion of an interactive user manual
- Enhancement of UX and overall customer experience
- Addition of a comprehensive portal through which customers can make changes to the system



Published by Computer Task Group, Inc.

CTG is a leading provider of digital transformation solutions and services that accelerate clients’ project momentum and achievement of their desired IT and business outcomes. We’ve earned a reputation as a reliable, results-driven partner focused on improved data-driven decision-making, meaningful business performance improvements, new and enhanced customer experiences, and continuous innovation. CTG has operations in North America, South America, Western Europe, and India.