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Final Copy of Case Study

LOCATION:
Jersey City, NJ, US

YEAR:
2011

STATUS:
Laureate

CATEGORY:
Innovation

ORGANIZATION:
CN

ORGANIZATION URL:
http://www.cn.ca

PROJECT NAME:
iCREW Solution

PROJECT OVERVIEW

CN is a North American transportation company offering integrated freight services including ground transportation, warehousing and distribution and bulk materials management. The company has been through privatization and massive transformation over the last 15 years and is now the most efficient rail transporter in North America. Ensuring each train is staffed with the right crew is vital to CN's efficiency. The company recognizes that its employees are its most important assets and ensuring they have a good work-life balance is paramount to their productivity. Each train's crew is responsible for managing all aspects of the train while in operation, including the coupling and decoupling of carriages, safe conduct and freight shipments. Assigning crew members to trains, however, is surprisingly complex, with numerous factors to take into consideration such as: • Skills and qualifications • Seniority • Route territories • Union agreements • Industry regulations • Hours of service • Vacation and route requests from crew members Combining these requirements with dynamic train operations while minimizing costs and service disruption is complex and time-consuming. CN uses a legacy mainframe system for crew management specially built for the rail industry 20 years ago, but was keen to update and integrate crew management with its SAP ERP (enterprise resource planning) and HCM (Human Capital Management) systems. As part of CN's ongoing transformation program, the company had made significant investments in SAP technologies and skills, and was keen to drive further value from these assets. CN decided to partner with HCL AXON to design and develop a pioneering crew management solution, known as iCREW, as an extension to its existing SAP HCM system. This was major undertaking due to the level of complexity and interdependencies involved in managing train crews and the ground-breaking nature of the project. However the strength of communication and partnership approach between the project stakeholders and development teams across both companies ensured any obstacles were quickly overcome. The iCREW solution is founded on the SAP business rules framework and best practices. By integrating information from multiple sources, it automates the process for assigning crews and provides decision

support for the crew management team.

SOCIETAL BENEFITS

Railroads are one of the most sustainable methods of transportation, using six times less fuel than trucks and four times less fuel than ships. By enhancing the efficiency of its operations, CN can provide lower cost services to encourage more customers to use rail, thereby minimizing environmental impact.

PROJECT BENEFIT EXAMPLE

iCREW will transform how CN's crew management teams work, resulting in greater efficiency. As well as freeing up staff from repetitive manual tasks, CN will be able to safeguard compliance with industry regulations. The new solution has a flexible and intuitive Web-based interface that is much easier to use than CN's previous 'green-screen' system. iCREW provides sophisticated and comprehensive functionality, including • Crew administration and roster management • Work assignment including rules-based evaluation and award process • Vacation request management • Real-time pay calculation and integration with SAP Net Payroll • Hours of service records The solution will not only be used by crew management teams, but also other local managers and crew members themselves. For example, more than 7,000 crew members will be able to use the solution to request vacation dates and view rosters. The most important benefit of iCREW is its ability to empower train crews to better manage their work-life balance while safeguarding efficiency, service quality and compliance for CN. CN's customers will also benefit from the solution, as the rail company will be able to provide more cost-effective and reliable railroad transportation.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

This is an outstanding example of an organization leveraging its sizeable past investments in ERP technologies, infrastructure and skills to address high value industry-specific business requirements at the lowest possible total cost of ownership with an innovative partnership.