

Customer : A Large Railroad Company

About the Customer - One of the largest freight railroad networks in North America and is also one of seven North American Class I railroads with a revenue of approx. \$23 billion

Engagement Background

Rail company is undertaking an enterprise transformation initiative – an exercise aimed at modernizing core Transportation Support System (TSS) applications. Rail company is moving to a new state architecture from the legacy (mainframe) architecture. This transformation is aimed towards improved time-to-market, improved quality, reduce risk, customer satisfaction, and reduced cost. To support this vision, Rail Company has developed a product development lifecycle. This lifecycle integrates industry leading best practices, methodologies & processes for Technology Services across the areas of Enterprise Architecture (TOGAF), Scaled Agile Framework (SAFe), Project Management (PMBOK) and Operations & Service Management (ITIL). HCL is providing consulting, implementation and support for these business changes. HCL is ensuring that the transformation is widely understood, embraced, and successfully implemented across the enterprise.

Business Challenges

- Decentralized processes
- Vendor to support for Enterprise Transformation
- Provide strategy and roadmap for DevOps, LMA, EA, BA, Application architecture (multiple apps) and implementation., tool selection
- Identify metrics and reporting criteria across team, program, portfolio
- Enabling the workforce to align with the transformation initiative by working hand in hand and providing training.

Solution

- Tailor the product development lifecycle process (strategy analysis to production deployment) and support to fit the execution needs of Rail Company.
- Build DevOps strategy and roadmap
- Identify the portfolio, program and team metrics for measurement and continuous improvement.
- Standardization of tools across the enterprise.
- Establish and create the DevOps continuous delivery pipeline for multiple projects with the right set of integrated tools, LEAN process flow, approval gates and automation.
- Provide Enterprise architecture and Business architecture consulting and implementation
- Provide the infrastructure architecture for Kafka messaging, Service Virtualization, ELK and other tool setup.
- Built CI/CD flows using the below tools –
 - VersionOne for ALM
 - Jenkins as continuous Integration engine
 - GitHub for source code repository and code review
 - Gradle for automated builds
 - SonarQube, PMD, FindBugs for code quality analysis and reporting
 - Artifactory for artifact management
 - Docker for Ephemeral build slaves
 - Chef for IaaS
 - ELK for LMA
 - Selenium and Jmeter for automated functional and non functional testing

Benefits to Customer

- Thought Leadership for driving the Enterprise Transformation
- Implementations & training on SV, LMA, Docker, EA
- Implement CI/CD pipelines for multiple projects
- Assessment, recommendation and implementation on DevOps toolset
- DevOps strategy and roadmap

Tools and Technology

VersionOne, Jenkins, GitHub, Gradle, SonarQube, Artifactory, Docker, Chef, ELK, Tibco, Kafka, Java, Groovy, CA SV

Project status

Ongoing, onshore-Offshore
T&M and Managed Services

Solution Architecture

