



cloudmoyo™

Railroad Digitization, Reimagined

# CLOUDMOYO RAIL TRANSPORTATION MANAGEMENT SUITE (CRTM)

Railroads are an important part of the economy and are responsible for the transportation of nearly 35% goods across North America. The industry has traditionally been characterized by five key challenges:

- ✓ Management of a unionized workforce
- ✓ High regulations and penalties
- ✓ Lower resource utilization
- ✓ Complexities and silos in operations
- ✓ Long revenue and dispute cycles

The rail freight market is poised to grow at an aggressive rate for the next few years<sup>1</sup>. Railroads, today deliver the most competitive cost per mile advantage in the transportation industry. To grow and sustain this advantage, they need to modernize quickly in step with rapid disruptions in business models within the transportation industry. Railroads need to implement digital solutions that can empower them to increase operational efficiencies, maximize asset utilization, lower costs, and enhance customer satisfaction.

With competitive industries like trucking developing disruptive business models to ensure faster delivery times, lower costs, and enhanced customer service, it is imperative for modern railroads to stay ahead of the disruption cycle and accelerate digital adoption across business functions.

## Current drivers of digitization in railroads today

Precision Railroading is the key driver of rail digitalization today, featuring process automation, intelligent algorithms, smart scheduling, data intelligence, training, and development. There are five core principles in Precision Railroading:

### 1. Improved operational safety

Increase safety through operational testing, enhance compliance, training and certifications, incident capturing, information security, and data governance.

### 2. Reduced operational costs

Reduce deadheads and dwell times, achieving optimum fuel and power utilization.

### 3. Increased asset utilization

Reduce dwell times, as well as optimize equipment allocation.

### 4. Improved crew performance

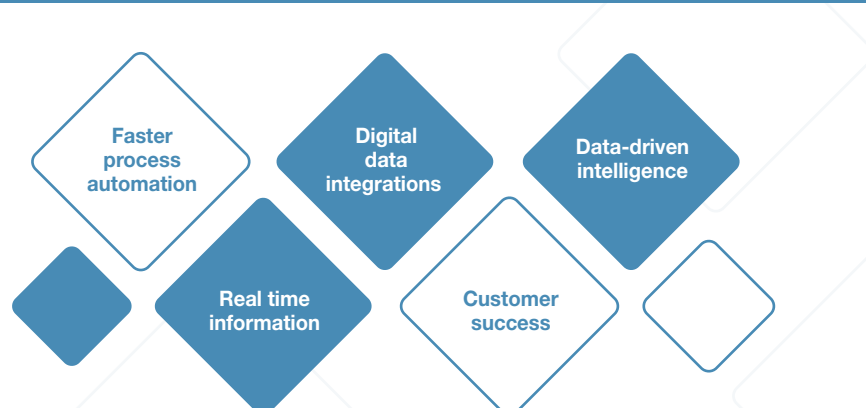
Factor in Hours of Service (HoS), training and certifications, adherence to union contracts, claims management, and dispute management.

### 5. Enhanced customer service

Access real-time information, improve train speeds, and ensure effective intermodal operations, dispute management, and revenue settlement.

Positive Train Control (PTC) is the other significant catalyst of rail digitalization today, and includes technologies like GPS, IoT, location tracking, signaling systems, and data links that are designed to control train movements and increase the safety of rail transportation.

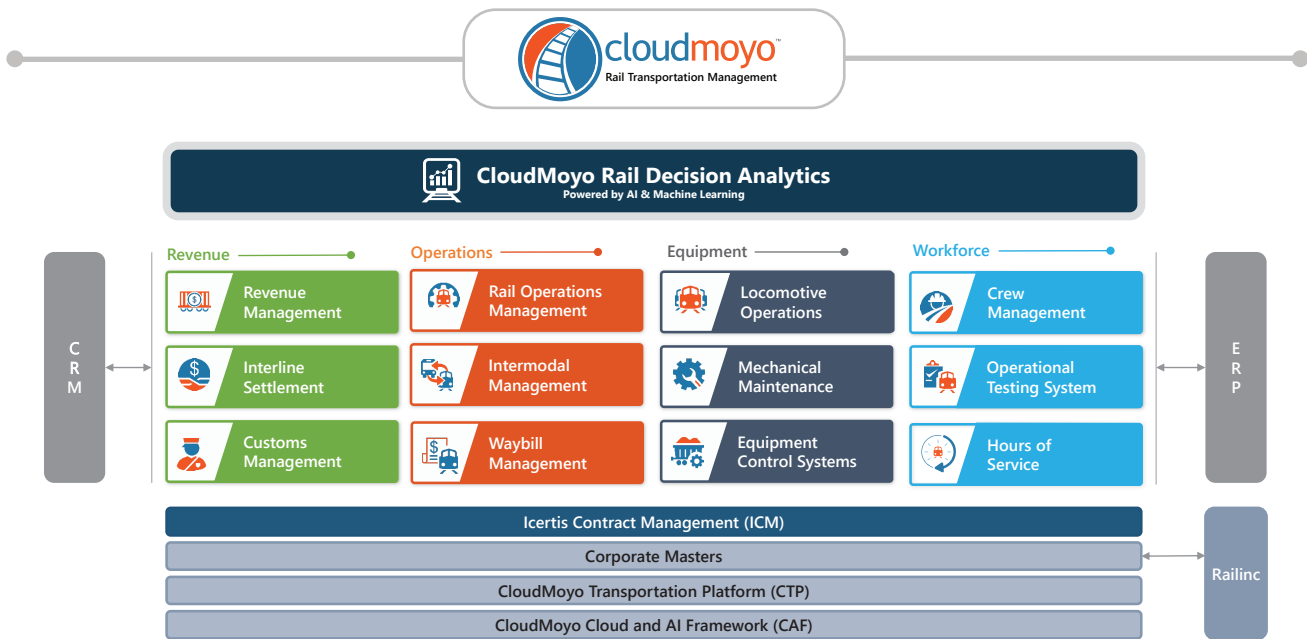
## 5 results of digitalizing modern railroads



## Introducing CloudMoyo Rail Transportation Management Suite (CRTM)

CloudMoyo Rail Transportation Management (CRTM) suite empowers railroads to digitalize their core operations, revenue functions, and asset and workforce management processes.

Powered by a sophisticated optimization engine, intelligent algorithms, advanced analytics, and AI/ML, CRTM offers enterprise-wide operational visibility to streamline operations, reduce costs, and drive efficiency as railroads look to accelerate digital transformation within their companies.



## CRTM business benefits for modern railroads

### Improve operational efficiencies

- Lower operating ratios
- Better service design and increased network capacity
- Improve switching dwell time with faster intermodal container throughput
- Enhance enterprise-wide visibility with an integrated TMS platform

### Prioritize productivity, safety and compliance

- Adhere to labor laws and union agreements
- Increase enforcement of GCOR and FRA guidelines
- E-file custom clearances
- Improve crew utilization and reduce deadheads
- Improve audit readiness

### Higher equipment utilization

- Reduce asset breakdowns with predictive maintenance
- Optimize locomotive and rail car allocations to allow longer, more effective train runs
- Optimize fuel and power utilization
- Reduce equipment dwell times

### Enhance customer experience and industry relations

- Streamline order and waybill management
- Predictable and transparent delivery schedules
- Faster interchanges and intermodal transfers
- Faster interline settlement dispute resolution

## The CRTM advantage

Flexible product configurations

Advanced analytics and AI

Intuitive user experience

Scalable architecture

Seamless integrations

Rapid deployment

CRTM has been effectively helping Class I, Short Line, and Regional railroads across North America to accelerate digitization and adapt to changing business dynamics. A large, Class I railroad in North America implemented CRTM and was recognized as one of the CIO 100 Award winners (May 2018).

**We are thrilled to partner with CloudMoyo as we work towards a corporate vision of consistently being the fastest-growing, best-performing, most customer-focused transportation provider in North America.**

**Mike Naatz**

SVP & Chief Information Officer at Kansas City Southern Railway

## About CloudMoyo

CloudMoyo empowers rail and transportation companies to gain greater insights, unlock efficiencies, and improve agility in operations, revenue and asset management, as well as critical areas of safety, crew scheduling, and maintenance. Combined with deep rail industry expertise, our cloud-based, AI-driven solutions leverage cutting-edge technology to reimagine railroad digitization. Headquartered in Bellevue, WA, with a presence in Kansas City, MO and an innovation center in Pune, India, CloudMoyo is partnering to create an efficient, productive, and reliable digital-rail ecosystem.

