Rail in the Information Age

PRESENTED BY HERMAN HAKSTEEN
JUNE 2018
WASHINGTON, DC
A hub & spoke network that joins 9 major railroads and over 550 short line and regional freight railroads to provide door-to-door rail service.
Every week 700,000 railcars are loaded in the North American rail network – an equivalent of 2.1 million truckloads.

This Rail Network is the single most important and valuable transportation infrastructure asset that America has.
But the Railroad Networks in America are challenged...
Railroads keep an eye on these 700,000 railcars with a cutting edge tracking and tracing system. It is a technology format known as barcode reading, developed in the 1960s.
Other Challenges in the Network

- There are nine major and 550 smaller companies that own parts of the railroad network in North America.
- There are inconsistent weight restraints across the network.
- Speed restrictions are inconsistent across the network.
- There are track sharing issues, freight trains and commuter trains use the same infrastructure.
- Railroads do not share each other’s assets, and don’t allow reciprocal switching.
- The government manages or controls the railroad network through an agency known as the Surface Transportation Board. This agency has been completely ineffective at bringing change and modernization to the rail network.
- Railroads could be so much more efficient if they were driven by data and consumer demand, not railroad special interest or business interest or legislation.
Focus on Information

- The need for a national database is endless in today’s rail industry.

- Some of the information required would include:
  - Location, ownership of rail lines
  - Access, services and resources on those lines
  - Speed and movement of trains
  - Network visibility of not just engines but all the cars in the trains and the commodity on those cars
  - Weather overlays for fuel planning, schedule adherence and rerouting requirements
Introduction to Cryo-Trans

The largest builder and lessor of refrigerated and insulated rail cars in the world.

We not only provide assets, we manage rail supply chains for some of the largest food and beverage manufacturers in North America.
In order to be successful in managing Fortune 100 company rail supply chains, we needed to develop in-house systems based on GPS technology with real-time connectivity.

Our systems track rail car location, security of the car, temperature interior and exterior, and impacts.

Our systems in a small way represent where the national database needs to go.
Rail Fleets At-A-Glance
Single Car Route
### By Car Information Detail

**Trip Details**
- **Car Mark:** CRYX 005980
- **Ship Date:** 06/07/2018 00:00
- **Fleet Name:** MR ATLANTA
- **Bill #:** 3373355
- **Origin:** LINEAGE COLUMBIA LLC
- **Destination:** THE MARTIN-BROWER COMPANY LLC
- **Product:** CASE POTATOES, FRESH FROZEN (2037315)

**CLMs for CRYX 005980**

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**Trip Notes**
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**Lat-Lon Data**
- **Could not find Lat-Lon data for car.**

**Star Track Data**
- **Power State:** ONLY
- **Last Reading Date:** 06/13/2018 22:23
  - Set Point: 0.00
  - Fuel Level: 378.00
- **Return Temp:** 3.60
  - Discharge Temp: -6.30
  - Last Maintenance Date: 06/13/2018 22:23
Today’s supply chains demand visibility.

Visibility comes from technology. Without technology our most important transportation asset becomes inefficient and unusable.

One central database will help drive that efficiency and help save the North American Rail Network.