



# Rail and the 4<sup>th</sup> Industrial Revolution: It's in Our Hands

Larry Jordan | Wi-Tronix Founder and CEO



# BRAVE leadership

Be **B**old

Be **R**esilient

Be **A**daptable

Be **V**ulnerable

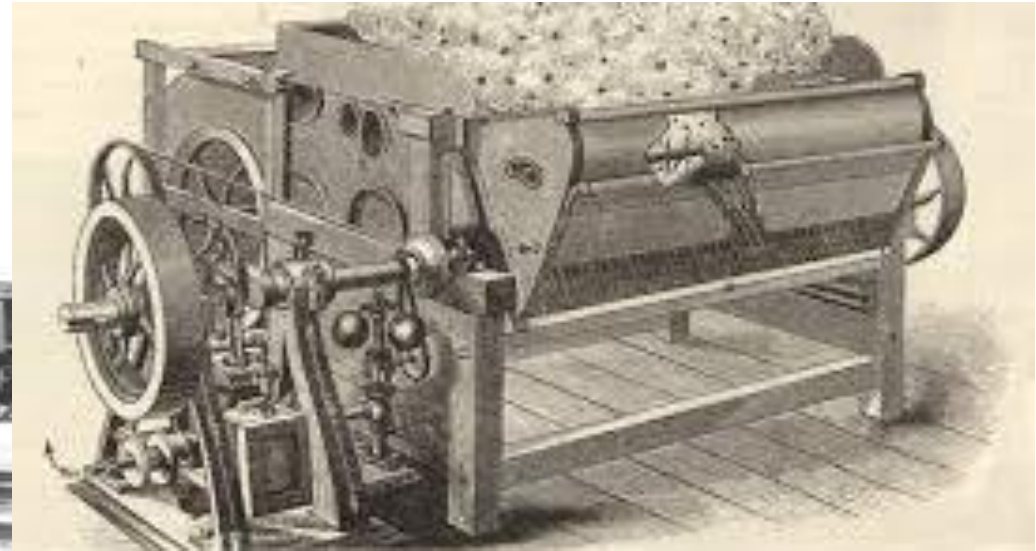
Be **E**ncouraging

# Rail growth & expansion:

BRAVE leadership will drive the adoption of 4<sup>th</sup> Industrial Revolution technologies



# 1<sup>st</sup> Industrial Revolution



# 2<sup>nd</sup> Industrial Revolution



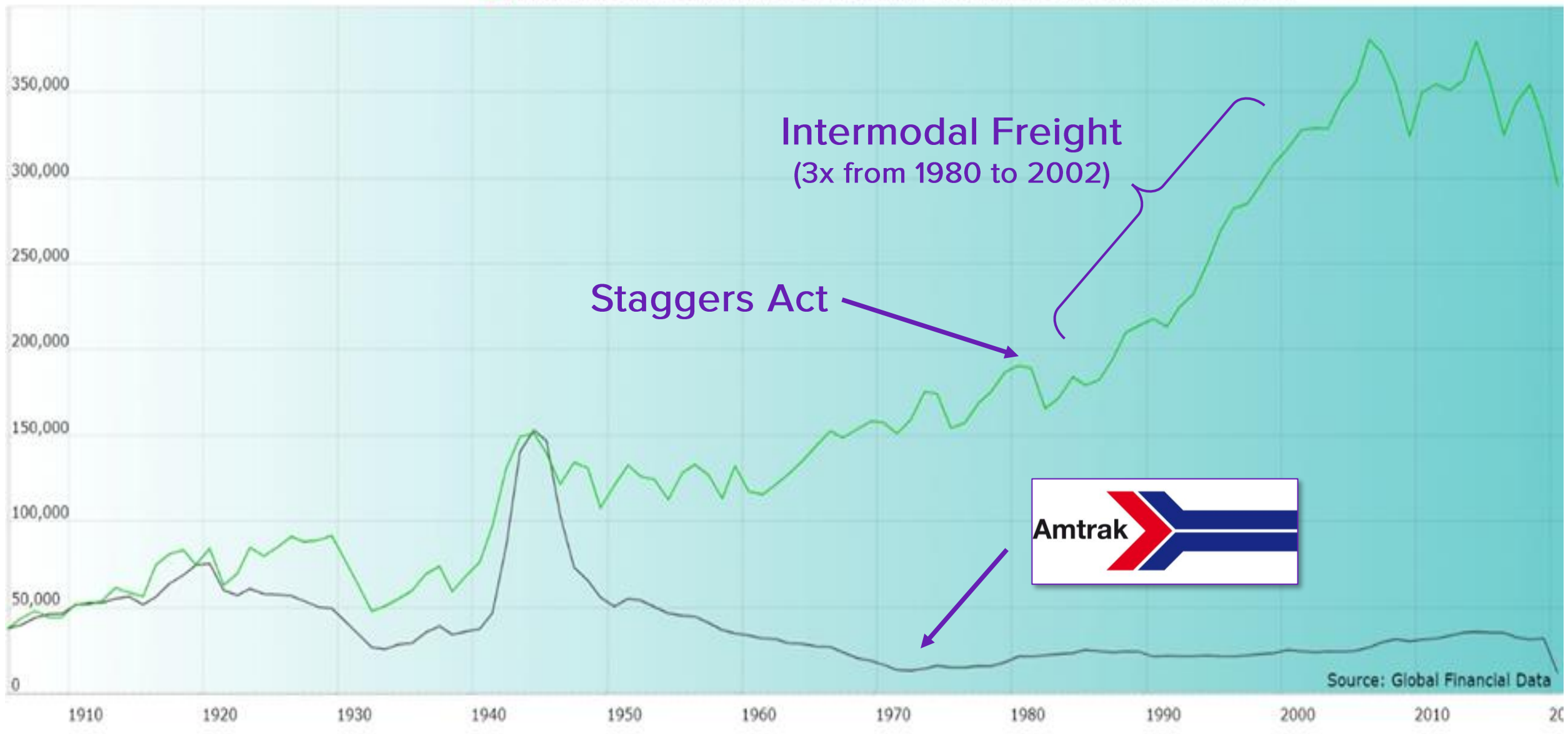


# The decline of rail



**Common Value Comparison (Target Currency)**

- (RRPKUSA) United States Railroad Passenger Kilometers (with GFD Extension)
- (RRFKUSA) United States Railroad Freight (million ton-kilometers) (with GFD Extension)





# 3<sup>rd</sup> Industrial Revolution: digital revolution



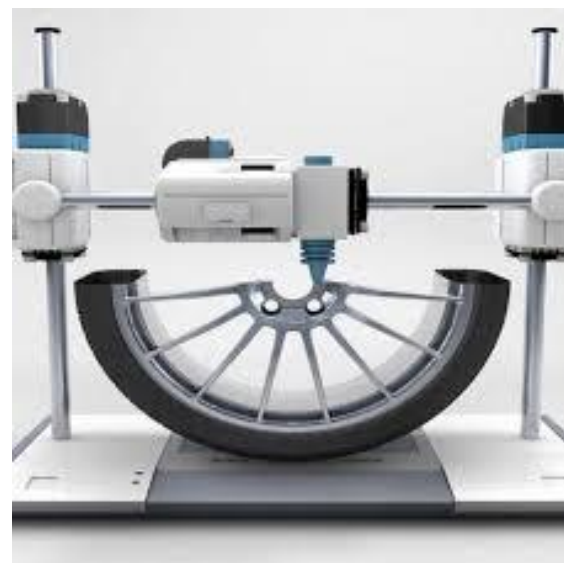


**Wi-Tronix was born  
August 23, 2004:  
a child of the 3<sup>rd</sup>  
Industrial Revolution**

## **II. Executive Summary**

Wi-Tronix provides products and services to wirelessly monitor high-value mobile assets such as locomotives, industrial equipment and marine vessels. Mobile assets of this class are typically the workhorses of an enterprise. In the past, mobile meant disconnected. Being disconnected causes great inefficiencies in an enterprise that counts on mobile assets for its core business operations. Advanced commercially available wireless technologies now enable all types of assets to be connected throughout most of the world. Wi-Tronix's mission is to integrate these technologies to enable businesses to improve the operational efficiency, service reliability and safety of high-value mobile assets.

# 4<sup>th</sup> Industrial Revolution: intelligence









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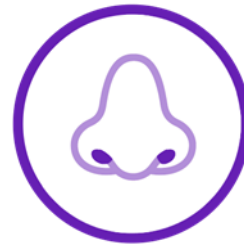
The transport mode  
that uses AI will take  
your market share!”

- Larry Jordan, CEO & Founder of Wi-Tronix

# Human force multiplier: artificial neural networks



See, Hear, Feel, Smell, Experience, and Respond



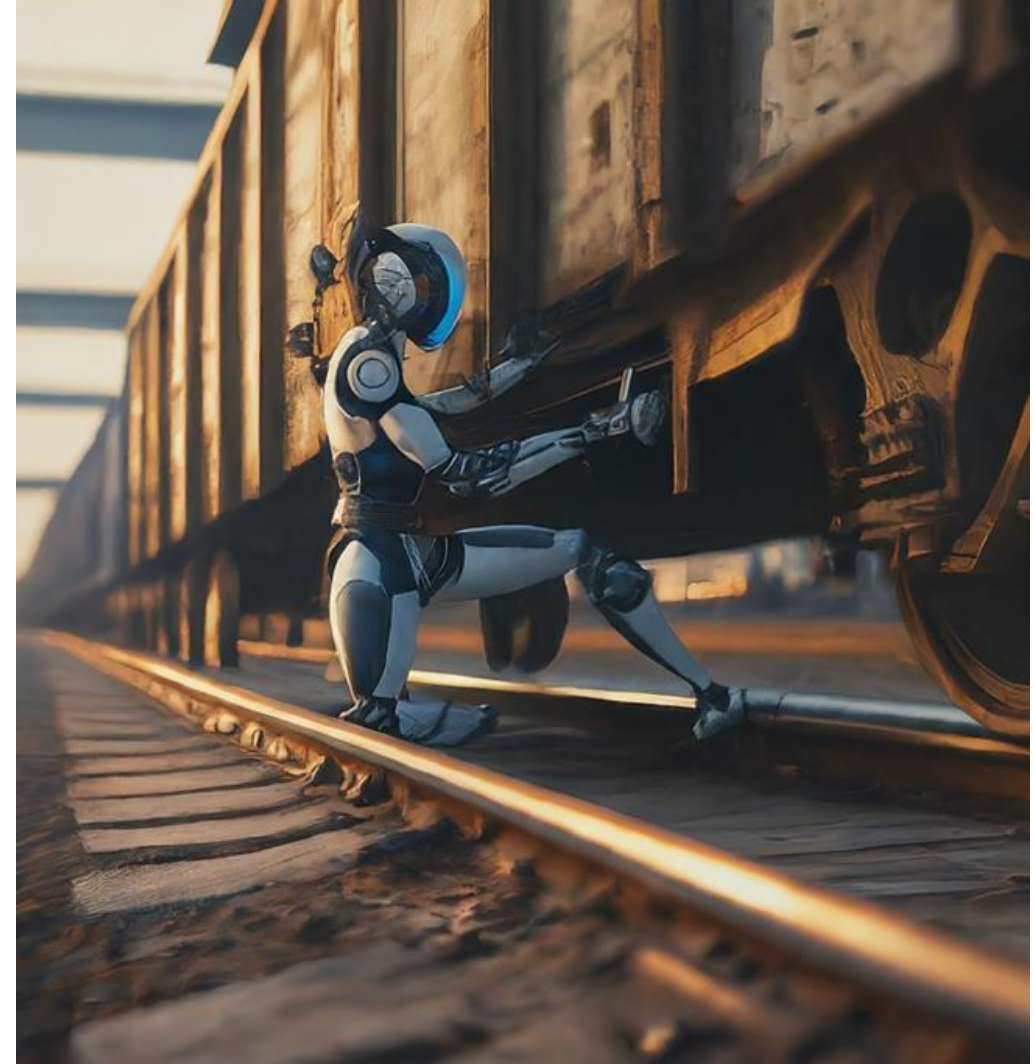
# Outcomes driven by an immersive AI-enabled platform

**SAFETY:** behavioral monitoring to assure administrative safety controls are properly executed

- Mobile device use detection
- Radio communications monitoring and analysis
- Camera obstruction monitoring
- Passenger aggression and safety monitoring

**EFFICIENCY:** continuous infrastructure monitoring

- Rail crossing inspection
- Trespasser and right-of-way intrusion detection
- Maintenance of Way inventory management
- Passenger counting and flow monitoring





# Global, cost-effective, high-speed digital communications

*The enabling technology for real-time immersive outcomes*



- Starlink now has global coverage
- SpaceX has over 7,000 satellites in orbit as of May 2025
- Direct to cell service is now available in the United States and New Zealand



- 5G widely available in North America
- Cost per GB continues to decline

# Global, cost-effective, high-speed digital communications

## *Outcomes: current and future*

- Immersive, real-time visibility for freight and passenger rail customer
- Improved rail network utilization using real-time monitoring, control and optimization



- Improved rail service frequency using autonomous or remote operation
- Improved passenger experience with real-time security incident intervention and detection



# The competition...



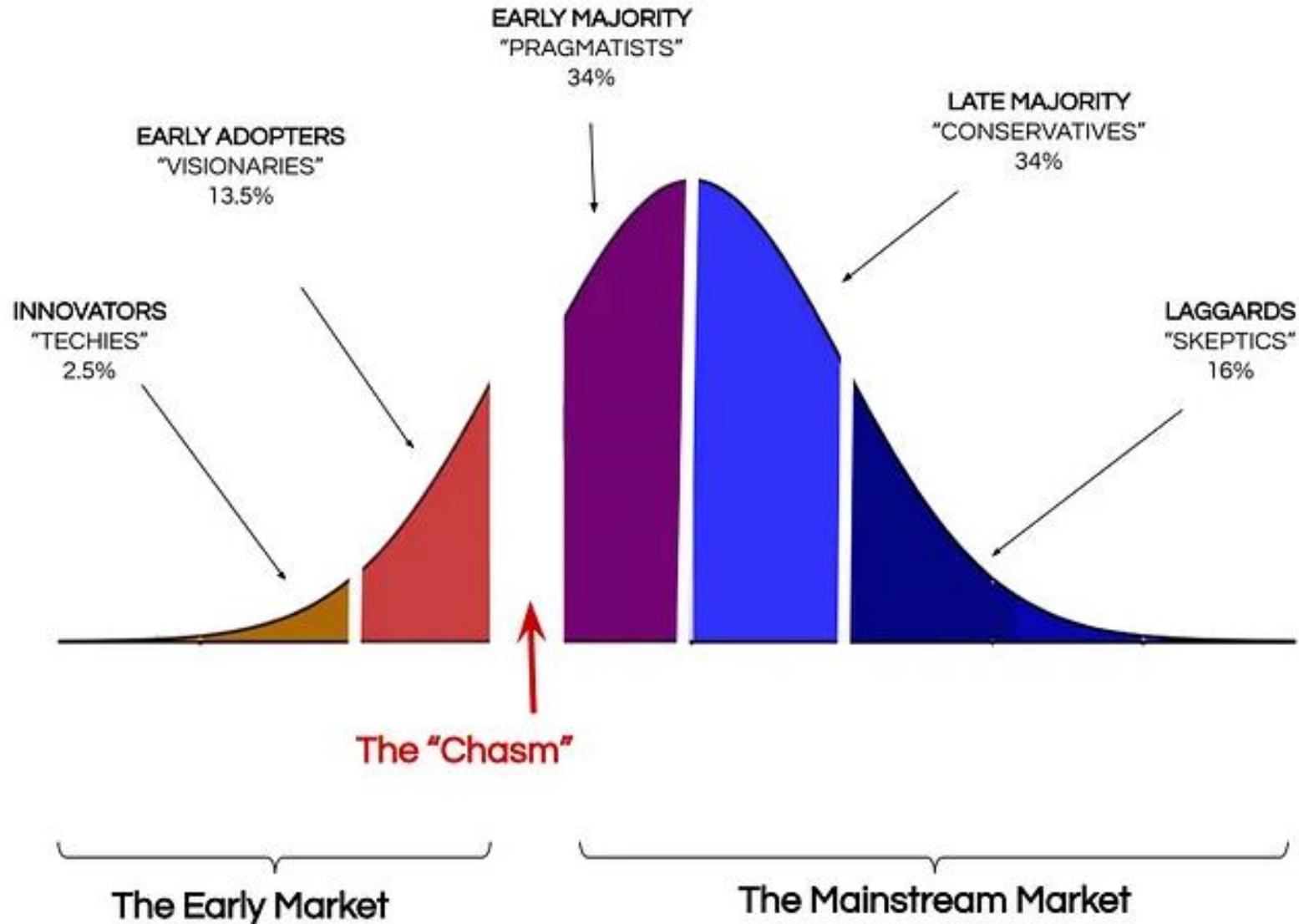


# Automobile full autonomy is extremely close to reality

*The impacts on  
everything from real  
estate to personal  
mobility cannot be  
understated*



# Diffusion of Innovation Theory (E.M. Rogers)







# thank you

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