



May 31, 2018

Technology & Innovation

Lynden Tennison
SVP & Chief Information Officer

Lynden Tennison Senior Vice President & Chief Information Officer



Lynden Tennison was named senior vice president and chief information officer of Union Pacific Corporation in February 2005. In his position, Tennison is responsible for organizing and managing the development, implementation and operation of Union Pacific Railroad's information and telecommunications technologies.

Before his promotion, Tennison was vice president-Information Technologies and chief technology officer for Union Pacific Railroad. Tennison was named to that position in 2001 and had responsibility for the application systems and architectures for the entire company. From 1998 through 2001, Tennison was president and chief executive officer of Nexterna, a technology subsidiary of Union Pacific.

Prior to joining Union Pacific in 1992, Lynden spent five years with American Airlines' SABRE division and was responsible for the Knowledge Systems organization. From 1979 through 1987, Lynden worked on various management and technical capacities for AT&T and Southwestern Bell Telephone.



Union Pacific Technology Team

World Class Team



Deep Software Expertise
Electrical Engineering
World Class Operations



1,500
Technology Professionals



800
Software Engineers



25
Distinguished Technologists

Union Pacific Technology Platform

Forging The Future



Application Services

- Workflow
- Rules
- AI/ML
- Notifications



Foundation Services

- Messaging
- Monitoring
- Data Grid
- Search



Gateway Connect

- Transform
- Multi-Protocol
- Multi-Party
- Guaranteed Msg



300M
Transactions / Day

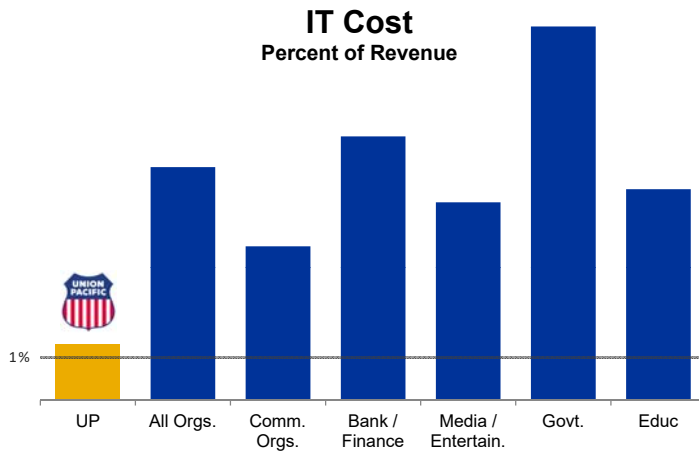


30,000
Messages / Second



3,000
Micro-Services

Focused On Business Value



Locomotive Radio Cost Reduction

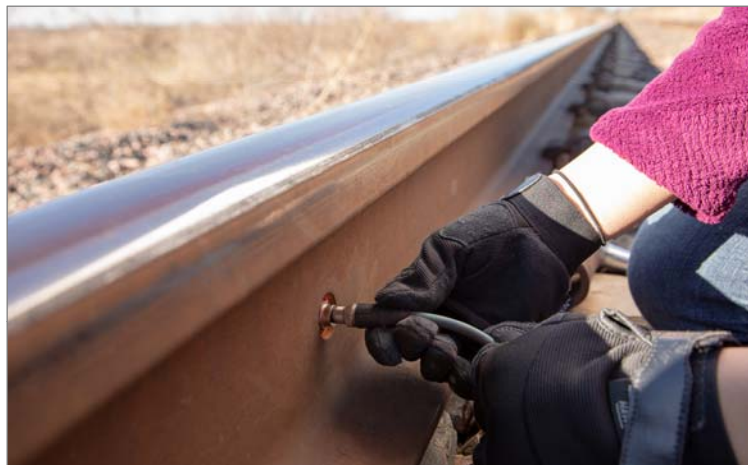


Internally Engineered
\$10M+ Savings

Sensor X



- Accelerometer
- Strain Gauge
- Digital Temp Sensor



* SensorX Patent Pending 62647445