The Internet of Things (IoT) is the network of physical objects—devices, vehicles, buildings and other items—embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data. -Wikipedia

The Internet of Things in the Supply Chain

Challenge
- The safety and security of cargos and personnel is of utmost importance to Expeditors, a leading global logistics provider.
- The company is dedicated to exploring security solutions so that cargos worth billions of dollars do not end up delayed or fall into the wrong hands.

Opportunity
- Integrate an IoT methodology into Expeditors’ supply chain operations.
- Equip cargos with sensors to enhance in-transit visibility.
- Connect people, processes, and data via cellular devices with GPS/GSM capabilities.

IoT Solution
- Sprint IoT platform enables SMS subscriptions and notification channels
- AWS Lambda accesses IoT data stream via REST API
- MySQL transforms raw data into structured format

Impact
- IoT is a real game-changer in the transportation industry. The benefits are wide and varied:
  - 24/7 real-time monitoring of customers’ shipments from origin to destination.
  - Optimized routes and improved security of cargos
  - Ability to identify problems proactively and faster response time
  - Better decision-making and reduced business risk

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Sprint IoT platform
- 24/7 real-time monitoring
- Improved security
- Better decision-making

AWS Lambda accesses
- IoT data stream
- REST API

MySQL transforms
- raw data
- structured format

Sprint IoT platform
- SMS subscriptions
- Notification channels

Everything is Connected!
- 24/7 real-time monitoring
- Optimized routes
- Improved security
- Better decision-making

Connect people, processes, and data
- Cellular devices
- GPS/GSM capabilities

Equip cargos with sensors
- Enhance in-transit visibility
- Enhance in-transit visibility

ManageTool.exe
- Device settings
- Sensor data
- IoT stream
- REST get
- REST response
- AWS Lambda
- Load messages
- AWS RDS instance
- Query
- User report