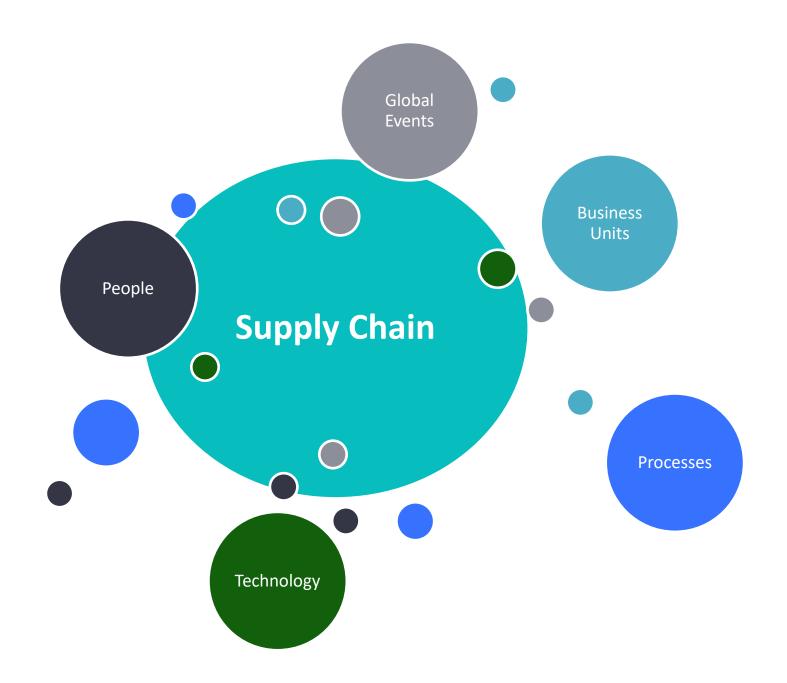


Ecosystem Thinking & Collaboration

Supply Chain Ecosystems

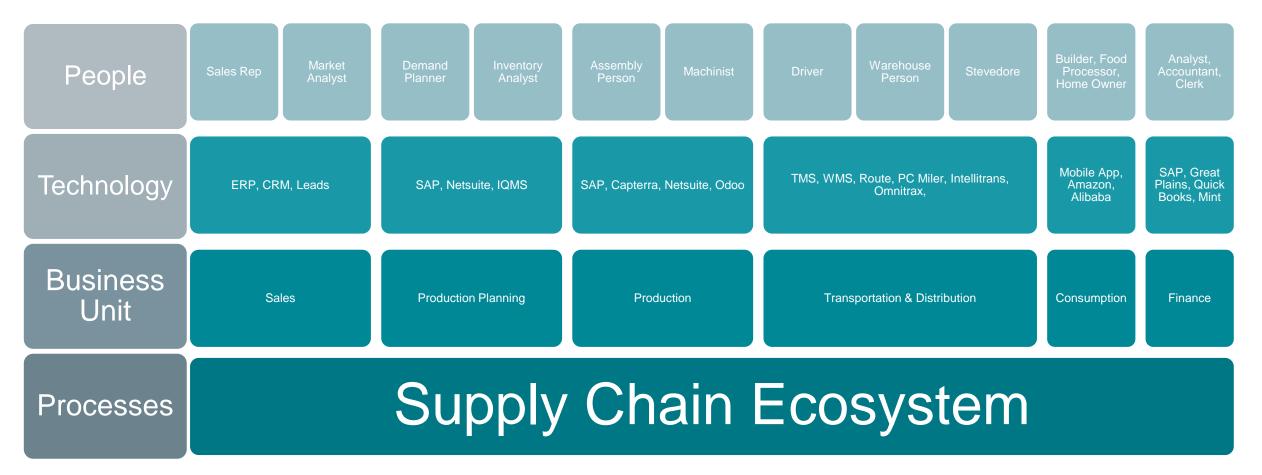
Ecosystem

"An ecosystem is a community of living organisms in conjunction with the nonliving components of their environment, interacting as a system. These components are linked together through cycles and energy flows." *Wikipedia*



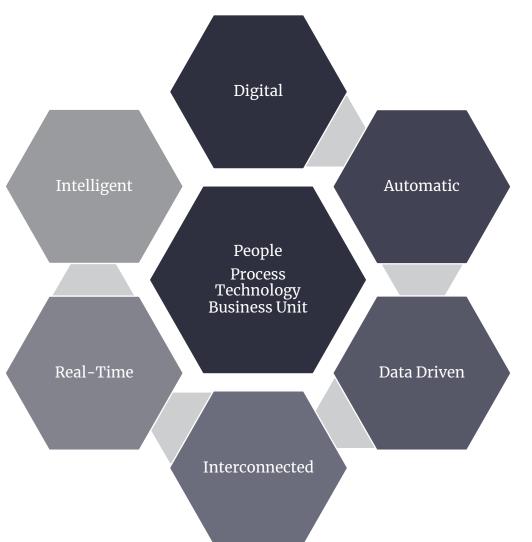
Interaction & Connection

Supply Chains are the most effective when all the interactions and connections are clearly understood, and where business processes are highly integrated. Waste occurs in the supply chain when there are silos and disconnected people, business units, technology and processes



A Digital Ecosystem

Digital Transformations



Focuses on:

- Accountability
- Reliability
- Adaptability
- Elasticity
- Communication
- Change
- Value Creation
- Knowledge Sharing
- Collaboration
- Partnerships



This is Quasar

See More. Ship More. Save More.



Introduction to Quasar

- Quasar Platform Ltd. ("Quasar" or "the Company") is an end-to-end rail logistics software platform providing a real-time data universe to freight rail shippers and operators.
- By combining real-time asset visibility with commodity, cost and revenue data, Quasar provides operators with an unparalleled ability to optimize operations and manage costs on demand with reduced manual effort.



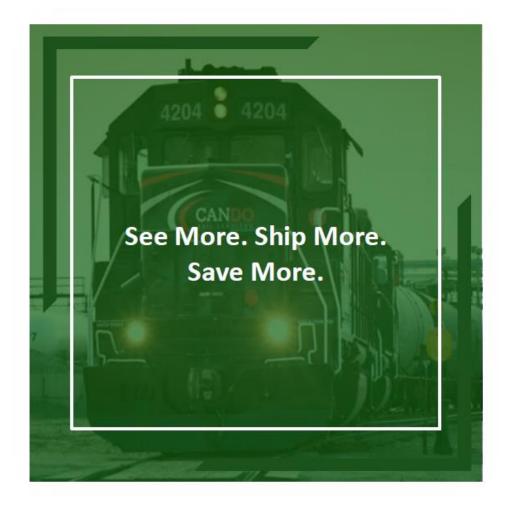
Provides rail shippers with a digital twin of the North American rail network



Ingests large volumes of data on railcars, goods intransit and freight costs from various sources including sensors, waybills, Class I manifests etc.



Through data aggregation and integration, enables advanced analysis of data including predictive ETAs, bottlenecks, congestion, and economic analysis



Quasar – the Rail Supply Chain Logistics Platform of the future



Quasar's application suite is the most comprehensive supply chain management software addressing the unique operational needs of the freight rail industry



Yard Management Monitor railcars within any type of railyard from the time they enter the yard until the time they leave.



Shipment Management Real-time tracking of railcars within 15 feet anywhere in the world.



Activity Based Costing Monitor, collect and create supply chain costs as they happen.



Quasar Dataverse Report dashboards and analytics that enable users to create reports, metrics, filters and workflows.



A solution designed to get the data



DATA INTEGRATIONS, CLEANING & TRANSFORMATION





Yard Management & Shipment Visibility

Quasar's platform can ingest data from any source and produce insights on a real-time basis unlike any other solution in the market

Shipment Management

- This module integrates waybill commodity data with asset location messages or GPS location sensor data to provide a unified view of asset location allowing operators to proactively avoid bottlenecks
- Through the use of geofences, Quasar's solution goes above legacy asset tracking technology with real-time asset location data anywhere in the network including rail subdivisions, railyards, customers sites, mines etc.

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Yard Management

- A digital twin of any yard, terminal or port in North America that automatically captures inbound asset data to enable operators to better manage inventory position, dwell, communication with their stakeholders, and outbound assets.
- Configurable to terminal specifications within hours and can be used for tracking inventory at any origin mine, destination customer, terminal or Class I railway; unlike any other solution in the market.

Activity Based Costing & Dataverse

Activity Based Costing combines operational and financial data to forecast supply chain costs, while the Dataverse uses the same data to generate automated and custom dashboards that allow operators to visualize performance like never before

Activity Based Costing

- Through a rating engine that matches operational information to cost rates for specific services or goods, Quasar automates manual data entry and cost forecasting – allowing focus to be shifted to optimization efforts and enables cost effective decisions to be made in real time.
- Benefits to operators include:

Save time spent on manual freight audit and pay transactions



Enables proactive operational decisions that save money

Calculate various operational costs with minimal error

A service framework for the service for the se



Dataverse

- Customizable operational reports and dashboards provides users with the ability to harness shipment level data that can be set to run on time intervals or event-driven basis.
- Quasar is currently integrating its application suite with Tableau as well to increase the flexibility of the platform for customers.





Sensors

IoT Sensors enable real-time data collection and two-way communication between railcars and Quasar's application suite



- Quasar's highly flexible software applications are sensor agnostic, an attractive feature for many customers who have implemented legacy telematics and rail logistics software systems or have already installed sensors.
- Customers can choose their own sensors or have the option to purchase one of the following Quasar sensors, which are all certified by the American Association of Railroads:

Quasar Lenz 1.C

Pings railcar location every 10min and communicates the location within 15ft every 30min using the 4G cellular network in North America.

Quasar Lenz 1.S

Pings railcar location every 30min and communicates the location within 15ft every 30min using the globalstar satellite network.



Quasar Lenz 2.S

Pings railcar location every 30 minutes and communicates the location within 15 feet every 30 minutes using the iridium satellite network.

Hardware As A Service

Installation

- Installed in a fashion that does not puncture, damage or modify the railcar
- Relationship with many service providers that are E-Rail Safe / Class 1 rules trained, and H2S Certified
- Activation
 - Configured to specific use cases and customer preference
- Sensor health / battery life monitoring
- Maintenance
- Warranty (1 or 5 year)

We Offer Solutions That Are:

- Intrinsically Safe Zone 1, Div 1
- Cellular or Satellite
- Integrated with industry data



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