

# Supply Chain Analytics



Gain a holistic, data-driven view of key drivers impacting your supply chain for greater efficiency and lower cost

What is driving delivery delays from Supplier X?

What are the carrying costs of Product X compared to Product Y?

Which machines are likely to go down next month?

Where are bottlenecks occurring across my supply chain?

## Supply Chain Analytics Challenges Today

Organizations face a wide range of issues getting value out of supply chain analytics today. Supply chains are incredibly complex with a range of potential issues in logistics, transportation, production, and manufacturing. Analyzing and optimizing such intricate systems is difficult, as the interactions between different parts of the supply chain are not simple—for example, a disruption in production means a revision in inventory levels to avoid stockouts and potential financial impact of penalties for missed delivery deadlines, etc. In addition to these challenges, fluctuations in customer demand and external events can make forecasting seem like an insurmountable task. On top of everything, there is friction with most legacy supply chain systems interacting with each other and with new technology platforms, causing operationalization challenges.

Supply chain analytics are complex and increasingly hard to implement, however AI-powered analytics can help.

## AI-Powered Analytics for Supply Chain Analysis:

Tellius is a modern AI-powered analytics platform designed to overcome the challenges associated with supply chain management. The platform allows you to quickly bring together all of your data sources ranging from POS, supplier, demand, and production ERPs to better inform your analysis. Tellius helps companies keep up with the pace of change by enabling easy ad hoc analysis with natural language search and automated insight generation. With real-time analytics, supply chain teams can automatically detect outliers and anomalies, and be alerted when there are changes with your suppliers, manufacturing, and transportation processes.

The Tellius AI-powered analytics platform goes beyond traditional business intelligence. The platform offers:

- Automated insights help organizations make better-informed decisions about supplier relationships by identifying patterns of on-time deliveries, quality issues, and other performance metrics using key driver and trend analysis.
- Bring together all of your data in one place to analyze historical sales data, market trends, and external factors to improve demand forecasting accuracy enabling organizations to optimize inventory levels, reduce stockouts, and minimize overstock situations.
- Leverage anomaly detection from sensors and quality control processes in real-time to detect defects, anomalies, and patterns that might indicate production issues.
- Ability to easily integrate with existing technology stack in the organization and augment analytics on top of existing data.

## Why Tellius for Supply Chain Analytics

-  Automatically analyze millions of data points to identify true drivers and root causes to identify disruptions.
-  Unify data across all channels and easily integrate with legacy supply chain systems to dive into analysis faster in one place.

-  Ask and answer supply chain questions to unlock efficiencies for the entire organization.
-  Predict the impact of potential events through AutoML and accessible ML modeling capabilities.

# SUPPLY CHAIN ANALYTICS USE CASES

## Real-Time Visibility

Tellius unites disparate supply chain data, making it explorable and accessible to non-data experts while unlocking ML-based insights and patterns for real-time visibility into your full supply chain. Tellius also has built-in real-time anomaly detection and alerting allowing supply chain analysts to keep up to date on the latest issues with the supply chain. With real-time visibility with anomaly detection, supply chain analysts can monitor demand fluctuations and adjust inventory levels, production schedules, and distribution strategies in response to sudden changes.

## Assisted Decision Making

Developing efficiencies and improving the supply chain is an endless challenge for supply chain analysts. By leveraging the Tellius platform for data-driven insights and advanced analytics, identifying areas of inefficiency, and uncovering opportunities for optimization is made easier with the power of AI. Giving the power to run scenario analysis to end users helps with data driven decision making by enabling them to simulate different cases. And simplified root cause analysis can help spot underlying issues, and inefficiencies while user-friendly predictive analytics can help supply chain analysts prepare for potential challenges in advance.

## Enhanced Supplier Sourcing Strategies

Supply chain analysts leverage Tellius's natural language querying, live dashboarding and reporting capabilities to track and analyze supplier performance based on on-time delivery, quality, lead times, and responsiveness—and take the next step to identify root causes of disruptions or quality problems via automated root cause insights to more quickly identify potential issues and plan mitigation efforts. Tracking supplier health helps with long and short term sourcing strategies as well supplier risk mitigation planning.

## Comprehensive Risk Management

Identifying risks in your organization's supply chain is difficult. Tellius helps by making all of your data available in one location for exploration and analysis. From weather to transportation and historical data, Tellius provides a comprehensive view of all your available data. Tellius automated insights can provide deep insights into trends and root causes of potential challenges through the supply chain beginning from vendor development, purchasing, inbound logistics, material handling and outbound logistics, for a truly comprehensive approach to risk management.

## Improved Demand Forecasting

Tellius enables improved demand forecasting by factoring in external data related to market trends, seasonality, and competitive landscape with dynamic customer behavior insights through Tellius automated insights for more accurate demand forecasting. Unlike traditional BI tools which lack data granularity due to architectural limitations, Tellius features cloud-scale, lightning-fast data querying and visualization capabilities coupled with accessible advanced analytics to help supply chain teams reduce forecasting errors and cut down on costly stockouts and excess inventory.

## Success Story

The supply chain team struggled to identify product delay root causes due to inaccessible data stored in legacy databases with no reporting capability and skill gaps.

The team now uses Tellius for easily accessible, up-to-date metric tracking, dashboarding, natural language search for ad hoc investigative work, and automated insights to diagnose what drove process failures and segment identification of processes most prone to failure. Proactively attacking problems, the firm has reduced its aggregate process cycle time by 30%, reacting more quickly to issues while also being able to granularly pinpoint down to the manufacturing plant level where issues arise.

**30%**  
reduction in  
machine downtime,  
via predictive maintenance

**10%**  
reduction in production  
losses by identifying root  
causes of part shortages

**10X**  
faster supply chain analytics  
vs manual approaches