

Brochure

How Data-Driven Supply Chain Predicts Losses Minimizes Risks





Data-driven, supply chain prediction for risk minimization

All across the world, global supply-chain mechanisms have evolved into an extensive system of complex networks. Companies across industries rely heavily on all stakeholders of the supply-chains systems. This increases their susceptibility to various risks. These risks are further exacerbated by epidemics, natural disasters, and industrial accidents. This leads to accidental disruptions and even tremendous losses in supply-chains.

Supply chain management systems have undergone several hiccups over the course of the Covid-19 pandemic. They continue to face disruptions due to lack of adequate planning against the uncertainties such as an onslaught of the global pandemic and its after-effects.

Infusing intelligence into enterprise data has bolstered business operations to somehow sustain and continue in the face of growing demands and the ongoing supply-chain crisis. Today's prevalent question is "Is data alone efficient to sustain in probable future calamities?" and "To evade future crisis situations can data substitute human spontaneity?" Fortunately, the answer to both the questions is a reassuring-Yes.

For instance, using advanced data analytics, shippers can -

- Create an evolving sales forecast to predict transportation procurement needs
- Plan inventory replenishment, and
- Adjust the allocation of inventory across their full networks

The historical data insights from transportation analytics can further -

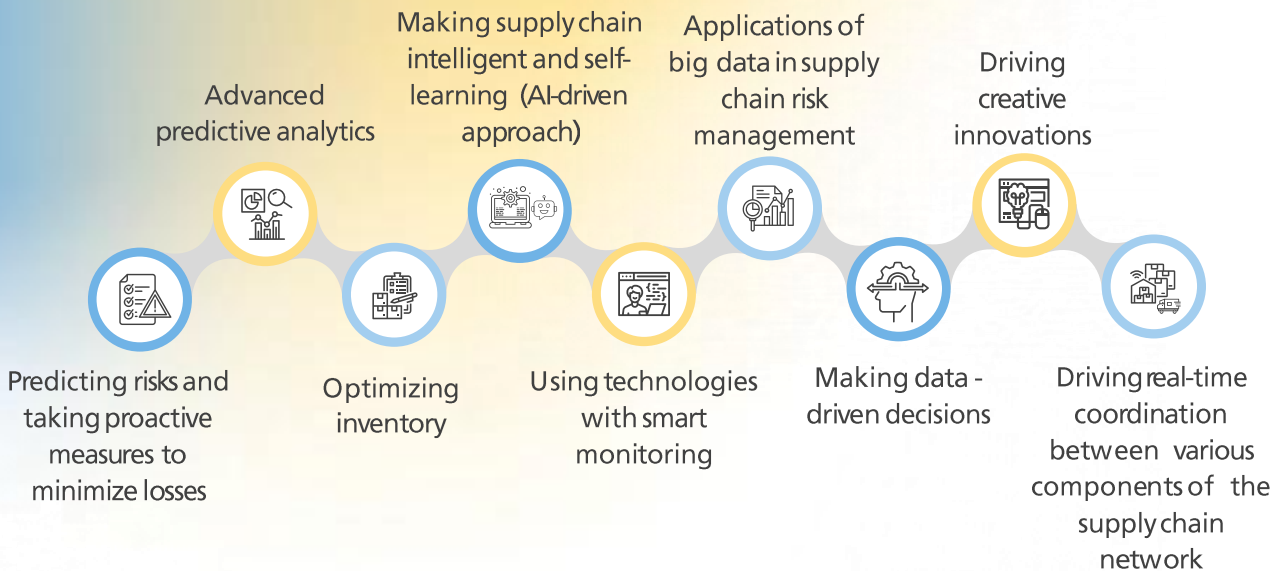
- Improve forecast accuracy
- Reduce costs, and
- Automate planning in inventory management and transportation capacity procurement

These data analytics and insight tools are invaluable in retail supply chain analytics and allow for a more complete view of the network size and volume.

The challenge today is how businesses can make the best use of the data residing within their supply chain management software. Data science technologies can help process this data and extract actionable insights to lend new functionalities and features to a supply chain management system.



Data-Driven, Smart Supply-Chain Management Network can help businesses in:



In a recent survey conducted by SAP, about a thousand American adults were asked to share their sentiments about the supply chain disruption during the pandemic. The findings reveal the growing discomfort and frustration amongst consumers as the holiday supply chain are being challenged due to disruptions.

<p>83% of consumers are reported to have experienced out-of-stock items during the pandemic, this is led to panic-buying.</p>	<p>of the same consumers also strongly feel that companies should have by now found solutions to supply-chain challenges.</p> <p>65%</p>
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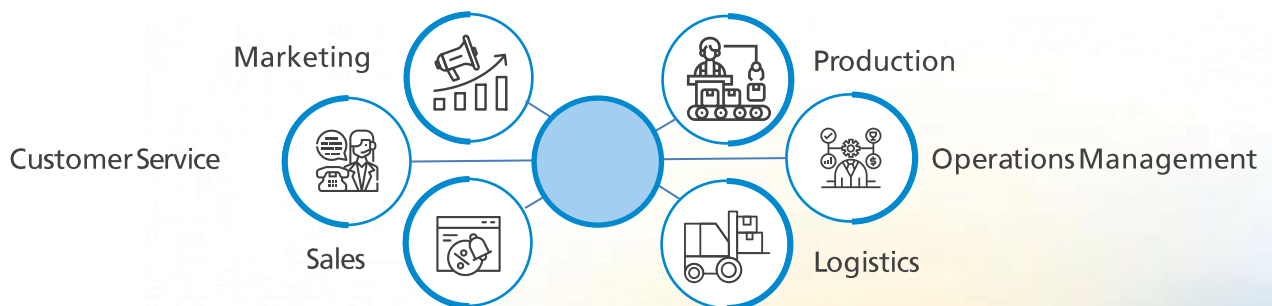


Predictive analytics

Predictive analytics is one of the most promising technologies in Supply Chain Management (SCM). It has been around for decades, but it is only recently that predictive analytics solutions have become mainstream. They have also become affordable enough to be used by small and medium-sized enterprises.

With the help of predictive analytics, companies can fine-tune their supply chains in ways that simply were not possible before. As data becomes more prevalent, so does the use of big data and predictive analytics to predict customer behavior and improve supply chains.

The data collected from the past can be used to find patterns and make predictions about future events. In a broader sense, historical information is utilized to create a mathematical model that reflects significant patterns and trends. Predictive analytics can be used in supply chains across various departments, including -



A predictive analytics solution helps in demand prediction, production scheduling, and inventory optimization. With good forecast supply chain managers can identify potential problems beforehand. This significantly reduces operational costs and downtime.

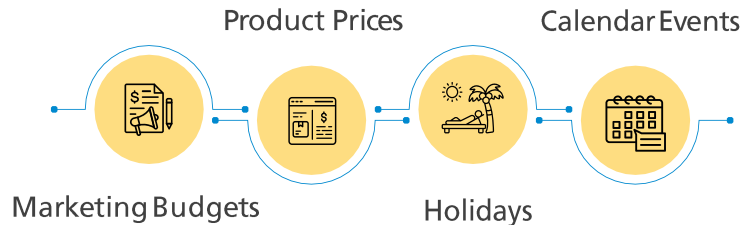
In addition to predictive analysis for production planning and scheduling, companies can use predictive models to simplify the maintenance process. This helps avoiding expensive breakdowns that could have been prevented with little preparation.

Bringing data deluge to your competitive advantage

The end-to-end supply chain process needs to be fed with the right insights. This helps in identifying trends and risks involved in the timely shipment of goods and services. It gets trickier to maintain product quality, save costs, and optimize inventory amidst a constant flow of data from systems like ERP (Enterprise Resource Planning) Systems, Accounts Payable and Receivables, B2B SaaS Applications Warehouse Management Software Transportation, and Logistics Platforms, etc.,

It is crucial to apply intelligence to supply chain analytics for managing constant data. Businesses are increasingly relying on machine-learning-backed supply-chain solutions. This helps in accurately forecasting consumer demand amidst a vibrant sales history.

The driving factors for sales are often industry dependent. Be it Consumer Goods, Automotive, Life Sciences, or Chemical Industry - machine learning models need to be trained by means of introducing additional data, such as -



For predictive analytics to identify business opportunities and risks, historical data acts as a backbone. The key business drivers, for historical data, are our sales and marketing budgets. It requires a robust business intelligence solution to extract insights from the pool of unstructured data.

Machine learning identifies the importance of these business drivers. It gives weight to each one, based on their direct impact on consumer demand. This helps the system generate forecast results with greater precision.

As companies gear up for the future, they must evolve their supply-chain planning. They must enhance processes to minimize operational silos and risks associated with market disruptions. They must maintain business continuity through timely responses to external changes. This readiness is possible by tapping into data beyond the usual procurement and ERP systems.

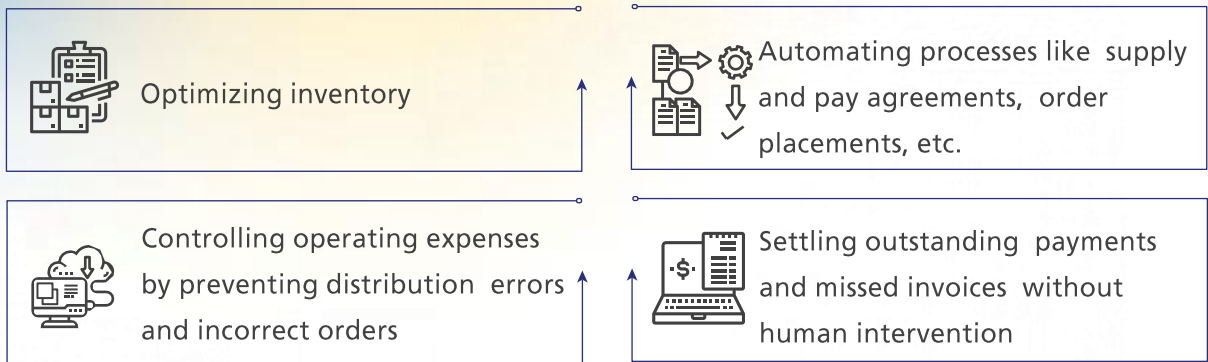
This can be achieved by incorporating inputs from marketing budget plans. It can be implemented for Proposed Product Pricing, Pending Calendar Events, and Changing Demographic Trends

The SAP ML model applies these learnings and generates demand forecasts, helping business operations adapt to changes automatically.



Improving profitability with a digital-first supply chain system

An intelligent supply chain system does more than applying learnings from the database and making decisions autonomously. In fact, it's one of the first steps towards improving profitability with value-added features like -



Responding to the customer churn as your key priority

With a growing number of competitor options, consumers can swiftly change their vendors and suppliers. The top three reasons why businesses need to constantly analyze their customer churn rates are -



Additionally, it's expensive to acquire a new customer than to increase business with an existing client. Organizations need to deploy an ERP system that can evaluate. Systems that can measure customer churn on a recurring basis!

Optimizing inventory levels with real-time insights

Companies following lean inventory practices ensure customers get what they want and when they want it. They ensure reasonable prices. However, in the recent rounds of lockdowns, we all witnessed concerns about supply chains and shortages. This led companies to rethink their strategy of eliminating excess inventory.

Most inventory planning software products are not designed to optimize inventory levels by learning continuously from data. That is where a modern platform such as SAP S/4HANA is necessary. It infuses intelligence into the steady stream of data. It generates actionable insights on SKUs, raw material supplies, and demand for goods.

Backed by powerful analytics, it can monitor inventory metrics in real-time across all devices. It identifies any anticipated issues with inventory levels. And notifies when certain KPIs (Key Performance Indicators) exceed the desired thresholds.

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