

Supply Chains of the Future

From space deliveries to smart connected cities to blockchainbased tracking apps: How to get ready for the new world. Supply chain capabilities have evolved far beyond what we've imagined, and future supply chains will do the same.

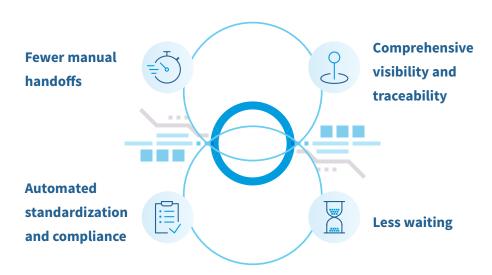
Taken to the extreme, shippers could be sending goods to support colonies, commerce, and research on the moon <u>and Mars</u> in the <u>next 20 to 30 years</u>.

Modern supply chain applications will be key to staying relevant and competitive in the future, but they can also fix today's problems. An integrated, cloud-based platform of applications, with connected networks and data, can improve performance now and prepare your organizations as these trends shape the future.



Last-mile delivery

Last-mile delivery is already challenging supply chains as urban populations grow. The final stage of getting goods to their destination is often where things fall apart in providing good customer experience. To provide local service on a global scale, you'll need the right technology to identify the best freight options, send stock to the right place, and optimize delivery times—all with reliable, frictionless workflows.



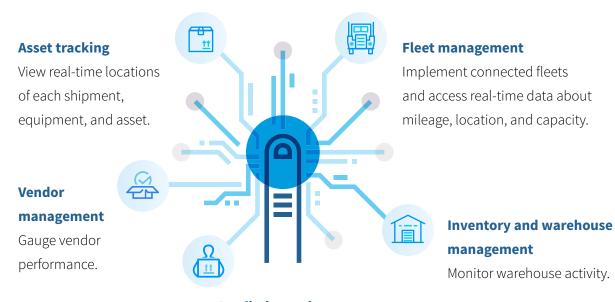
FRICTIONLESS WORKFLOWS

Connect your shipping system, your transportation management system, smart connected cities, and a global trade network for access to real-time data, database intelligence, and analytics.

Internet of Things

You're already working with data that's traveled over the Internet of Things. But the variety and amount of data will explode over the next decade as more sensors deploy. You'll need <u>better supply</u> <u>chain connectivity</u> to get the biggest benefits from the IoT.

How will your supply chain <u>leverage data from IoT</u>?



Predictive maintenance See assets needing attention

before problems occur, where best-available fleet capacity exists.

4

Blockchain

Blockchain usage is just beginning, but interest is high because of its <u>potential</u> <u>capabilities</u> for traceability and removing friction. Blockchain has the potential to:

Become critical to track-and-trace-

especially when handling products affected by temperature or movement, such as food or electronics. All partners participating in a blockchain have visibility into all digitally recorded actions, transactions, and verifications. Allow pre-verified and automated "hands-off" transactions within a closed network. This essentially eliminates many back-and-forth actions that comprise current-day B2B procurement.

Dubai wants <u>its entire government</u> to use blockchain in all apps by 2020.

- This includes visa applications, bill payments, license renewals, real estate trades, and land-purchasing deals.
- Future uses will be for financial transactions, electronically recorded contracts, and connecting homeowners and tenants to property-related billers.

Potential blockchain applications

Autonomous trading/ledger networks Automated loop for order processing; more efficient repeat orders

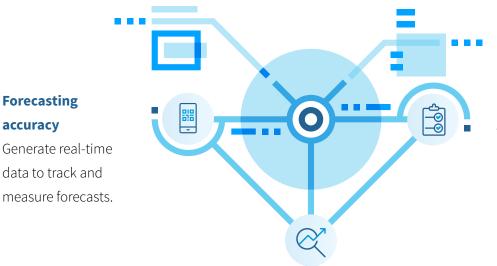
Network for suppliers and partners Automated smart contracts, payments, and shipments without human interaction

Track and locate materials Faster, more effective recalls.

Machine learning and artificial intelligence

The current adoption rate for machine learning and artificial intelligence (AI) is low, but that won't last. As data coming from supply chain sources increases, being able to <u>leverage AI and</u> <u>machine learning</u> through a connected supply chain will help you be faster, more agile, and better equipped to respond to customers.

Machine learning, AI, and critical supply chain improvements <u>enable</u>:



Supplier selection

Analyze and evaluate data from suppliers and receive recommendations.

Productivity Identify new factors that affect performance.

Autonomous trucks and drones

There's currently a low adoption rate of autonomous trucks and drones, but they'll be critical to future supply chains because they can stay on the road longer.

Autonomous trucks can haul the same amount of freight with 40% fewer trucks. This will cut congestion, increase safety, and reduce road wear and tear.

<u>Amazon</u> and <u>UPS</u> are currently piloting drone programs for deliveries.

What will change?

Network design Distribution center locations and sizes must move if trucks travel 1,000+ miles daily.

Delivery speeds

These will increase with fewer trucks on the road and trucks driving longer distances, with trickle-down effects on ordering, lead times, inventory levels, and safety stocks. Lower market prices and new

Cost of goods

sourcing strategies will pull costs down.

Delivery methods

Drones will shorten times between time of order and delivery, as well as expand delivery in hard-to-reach places.

We don't live in an isolated world, and neither should your supply chain. If you want a supply chain that can leverage all these trends, your applications, data, and networks must be connected and intelligently working together. BluJay Solutions has a collection of unique, off-the-shelf capabilities that we can use to help your supply chain get to this point. Our breadth and our depth are unmatched to get your supply chain connected and ready for the future.



BluJay Solutions delivers supply chain software and services to the world's most progressive retailers, distributors, freight forwarders, manufacturers, and logistics service providers. Transforming supply chain logistics with the BluJay Global Trade Network, we enable customers to unlock the power of more than 40,000 universally connected partners. With BluJay, companies can achieve greater trade velocity, transform their supply chain economics for disruptive advantage, and see beyond the horizon to optimize their future in the global economy.

Get Started