

# Automate, Optimize, Audit for Smart Supply Chains

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While politicians argue about the domestic effects of outsourcing manufacturing operations, logistics professionals know the practice only increases our responsibilities. The frenetic pace of global trade, coupled with the impact of outsourced manufacturing around the world, has transformed delivery of products into a complex engineering task that is quickly creating new jobs.

Academia is already responding. Anticipating a flood of new complexity, the Massachusetts Institute of Technology, for example, has expanded its logistics program and started a new master's degree dedicated to logistics in its school of engineering.

In corporate America, shippers, carriers, and third-party logistics providers are grappling with ways to adjust operations to maintain a competitive advantage in the face of new global challenges.

Three best practices for logistics professionals developing 21st-century supply chains are:

1. **Automate key processes.** Companies should automate both inbound and outbound logistics processes. The first step is using multi-carrier transportation software that moves product quickly out of your warehouse. Your transportation system should be able to pick and pack boxes in the warehouse, recognize standard weights and package dimensions by client or project, and enforce business rules set up to realize cost gains and appropriate time lines.

These automated business rules may require that all packages weighing less than 10 pounds ship with a certain carrier, for example, or that all pallets shipped via truck fleet use a different carrier. The process of automating these decisions—so warehouse personnel are not making haphazard shipping choices—can reduce costs within your organization.

In addition to shipping processes, companies should also automate transit visibility. Businesses should be able to customize shipment views—by customer, project, carrier, date sent, or other criteria—and access them quickly. Be sure that each view offers a full set of information for in-transit shipments, regardless of which carrier is handling them.

Configure your system so it proactively notifies you when an in-transit shipment violates set criteria. You may wish to be notified if a shipment doesn't clear customs in 12 hours, for instance. This visibility helps to more effectively manage customer expectations and increase customer satisfaction.

Finally, be sure your automated system is scalable. You shouldn't outgrow your current software as your company expands. Your technology should be robust enough to reliably handle double, triple, or even 10 times your current shipping volume.

It is crucial for the technology to be flexible as well, so new business partners and suppliers—each with their own business rules and requirements for shipping—can easily be added to the system. This flexibility lets your organization reconfigure the system within hours or days.

2. **Optimize key decisions.** Selecting carriers and service levels should not be a guessing game. Optimizing these decisions can be a strategic advantage.

In addition to automatically enforcing your organization's business rules, a good optimization process also identifies co-shipping opportunities—if multiple shipments are going to a single location, they can often be consolidated into a single shipment, then split apart for delivery at the destination.

If you use multiple carriers, take advantage of the best pricing each carrier offers. When deciding how best to tender a particular shipment, take into account business rules, carrier contracts, customer/vendor service level agreements, multiple rate sheets, delivery zones, and transit time.

3. **Audit your shipments after delivery.** Monitor your carriers' performance for both on-time delivery and compliance with negotiated rate sheets. Did each shipment arrive on time? If not, you may be entitled to a credit from your carrier on your next bill—but you're not likely to receive a credit unless you ask for it.

Timeliness is key. Many carriers only keep data about shipments made in the last 30 or 60 days, so it's important to identify late deliveries immediately.

Carriers may occasionally stray from the negotiated rate sheet and overcharge shippers. It is important to identify these overcharges quickly as well. You can cut a significant chunk out of each month's transportation bill by remembering to audit, flag overcharges and late deliveries, and request credits from your carriers.

As supply chains become increasingly complex, shippers continue to source from a variety of places, and delivery times shorten, it is crucial for businesses to increase the strategic value of their transportation strategies.

Transportation accounts for almost 10 percent of manufacturing costs—and for some manufacturers, the amount is significantly higher. Faced with these rising costs and the increasing complexity surrounding global business, it is essential to generate savings from each link in the supply chain. The best way to do that? Automate, optimize, and audit your transportation strategies.