Strategies to Build Efficiencies into Your Supply Chain and Logistics Operations
Maximizing growth and profits with robotic process automation for transportation and logistics companies.

Executive Summary

Transportation and third-party logistics providers (3PLs) operate in a challenging environment. Competition and commoditization work together to compress already-thin margins—and deny management the resources required to create new products and services that will ensure the organization’s survival.

Most providers have a significant number of customer service reps (CSRs) assigned to manual data processing and exchange activities, such as Track & Trace, gathering freight bill payment information, securing proofs of delivery (PODs), or resolving payment disputes. Although essential, these tactical activities are resource-intensive, error-prone and slow down the organization. While an integrated network of systems built around EDI or other core integration platforms can help automate the exchange of information between logistics providers, customers and partners, very rarely does it address the entire scope of the activities.

This white paper outlines key areas where third party logistics (3PLs), carriers, retailers and manufacturing companies can replace manual repetitive work within their operations with new and innovative robotic process automation technology solutions. Robotic process automation enables these organizations to generate significant benefits in the form of increased efficiencies, business agility and revenue growth.

“Payroll was growing, and a lot of time was spent simply hiring people. We finally realized that rather than work harder, we needed to work smarter. That’s when we brought in Kofax Kapow.”

Senior Software Developer, American Truckload Motor Shipping Carrier
Grow Business and Maximize Profits by Increasing Efficiency

As a logistics professional, you’re well aware of the dilemma your organization faces: you need to effectively manage day-to-day operations, while trying to introduce new products and services to competitively differentiate yourself and avoid commoditization. It can take considerable effort to launch a new product or service and sustain it into profitability, and funding these essential projects can be difficult.

A typical approach to supporting growth is to increase operational efficiency and invest the added margin in strategic initiatives.

A new and innovative approach is now available to providers that utilizes software robots comprised of powerful dynamic process flows to automate human interactions across the supply chain ecosystem with shippers, carriers, logistics partners, freight bill payment processors and other trading partners. This is referred to as robotic process automation.

While most organizations may have already found the easier improvements, robotic process automation takes it to an entirely new level, eliminating virtually any manual business activity where transportation and logistics providers can still realize significant gains in efficiency. Some of the essential business activities that can be automated include:

**Capturing new loads**: Many providers depend on manually copying data from load boards and emails into internal legacy systems—and copying it back into business partner portals mandated by partners like Walmart’s Retail-Link® to report shipment statuses. Delays can cause lost business.

**Performing rate lookups**: Multimodal carriers and 3PLs are especially impacted by the need to perform rate lookups manually. Errors can reduce margins or lose business.

**Track and trace**: Customers demand real-time shipment visibility, but using multiple carriers often forces providers to manually check shipment status. Often a carrier’s business portal must be accessed to gain up-to-date information.

**Invoicing and payment**: Chasing down PODs and manually updating the B2B portals of freight payment processors and shippers impacts timely receipt of funds. Delays at this stage can be reflected in needlessly high DSO (Days Sales Outstanding), and can unfavorably affect financial health.

**Manual information gathering and document handling**: Most carriers and 3PLs perform a wide variety of manual activities, such as locating shipping documents, responding to emails, and consolidating information. These tasks cost money and cause needless delays throughout the shipment’s life-cycle.

These functions—and many other similar back-office functions—have one thing in common: they are managed using costly and labor-intensive manual processes. Why is that?
The Rise of the B2B Portal

A major cost factor in transportation and logistics is the widespread use of B2B portals—partner-facing websites where transactions must be entered, largely or exclusively by humans. By externalizing the cost of support, B2B portal owners improve their own margins at the expense of business partners. Widespread B2B portal adoption means that organizations such as yours must access dozens of B2B portals as part of your daily business—tying up your customer service reps in manual activities, such as rekeying data, printing and filing reports and screenshots as well as other work the partner has offloaded to you.

The solution seems simple. By integrating with the B2B portal—just as your organization integrates its key IT systems—efficiency will soar and cost will plummet. But most integration technology has not kept pace with the growth of B2B portals. Some portals support integration through EDI and some offer APIs—software interfaces that can be used to integrate your internal IT systems with the portal. But even when EDI or APIs are available, development costs can be high and flexibility low, and if the portal offers no interfaces, you’re seemingly out of options—manual effort is your only choice.

A New Approach for Supply Chain Integration and Automation

A new approach is available: one that relies on “software robot” technology and not complex coding, that can integrate any internal IT system you have—Transportation Management System (TMS), email and Excel, with any of the B2B portals. It can also connect with other websites and databases that you may need to access and interact with, allowing you to automate key business process activities that include integrating with your customer and vendor systems.

With a robotic software automation approach, manual activities become a thing of the past. Business activities that make up critical operational processes and data exchange with partners is more standardized and efficient, allowing timely exception monitoring and reporting, so human intervention is reduced for handling and resolving operational events.

Take the Next Step: Process Intelligence

With robotic process automation and ongoing monitoring of core business processes, you can gain valuable insight into how the process is executing, identify trends and patterns in supply and demand, weather conditions, and how they impact delivery time—providing you the information you need to optimize and adjust. As a result, your organization is better informed and able to be proactive, not reactive—to be smarter and predictive in how you manage your supply chain and logistics.

With this new insight, organizations are able to move away from the static reports telling them at the end of the day or week when shipments are late or delayed, and how often. Organizations are able to anticipate problems and deal with bottlenecks and delays at specific steps in the shipping process, before they cause missed docking schedules and delivery penalties. Organizations can view their entire supply chain process in real-time, with the information from all the related internal and external systems. You can view and analyze all the information, making informed decisions with the right information at the right time.
Case Study - PITT OHIO

A transportation solutions provider of less-than-truckload, truckload, supply chain solutions and ground services in the Mid-Atlantic and Midwest United States.

Headquarters: Pittsburgh, Pennsylvania

Industry: Transportation and Logistics

Products in use: Kofax Kapow

Lower Cost Drives Top-Line Growth

In this brief case study, we examine PITT OHIO, a premier regional transportation provider that has evolved from its LTL heritage. Its challenges are very similar to those of other carriers and 3PLs around the world.

PITT OHIO differentiates itself from its competitors with award-winning service performance and a reputation for technical innovation. As part of its growth plan, PITT OHIO launched a premium-priced service for its best customers. The service provides multiple benefits—including a 2-hour Customer Service Level Agreement (SLA) running from the initial customer pickup request with shipment details through to delivery and final processing.

“**We’re seeing a 95% reduction in manual effort from our Customer Service Representatives. Kapow handles what our users were doing, automatically, more consistently and more accurately.**”

Darren Klaum, Director of Business Systems, PITT OHIO

Challenge

After the launch, PITT OHIO found that the manual effort needed to support just one of its key manufacturing accounts required nearly 100% of a customer service representative (CSR) time. With this level of manual effort, PITT OHIO could not afford to continue offering the service with the promised SLA.

---

Figure 1: Automating interactions and applying process intelligence across your supply chain and logistics.
Among the services these customers receive is the ability to request pick-ups by email. But to support this benefit, PITT OHIO’s CSRs (Customer Service Representatives) had to manually re-key shipment details from the original email into their internal scheduling application. Then, to confirm the pick-up date and time, a CSR had to login to the shipper’s portal and re-key the response. Similar effort was needed for each of the many status updates that premium customers received for each shipment.

Because PITT OHIO’s premium customers enjoy a 2-hour SLA, their CSRs developed their own paper-based system to track requests—and had to stop all other work once per hour to review their files, print incoming emails, and update each B2B portal with up-to-date status. This manual processing was so costly that each CSR could barely service a single premium customer—and PITT OHIO could not afford to expand the program.

**Solution**

The Kapow integration and robotic process automation software platform transformed their operations. It is now fully automated—from the initial pickup request through to the posting of shipment status from PITT OHIO’s fleet tracking system into each customer’s B2B portal. Today, only rare exceptions need to be handled by CSRs—taking about 5–10% of their time. The robotic process automation solution has resulted in a 90–95% productivity improvement.

**Results**

The process improvement benefits are significant and fall into three areas:

First, the direct cost reductions have been sizeable. After automating just three premium customers, PITT OHIO saved $190K in clerical costs per year. This savings goes directly to the bottom line.

Second, by returning the service to profitability, automating of manual business activities enabled PITT OHIO to drive top-line growth by signing additional premium customers to the service. It takes only a half-day to onboard each new client and the payback period is under a week.

Finally, the quality of customer service has improved. Pickups are confirmed within moments after the email request is received—not an hour or more later—and shipment status updates are posted within seconds. Even exception handling has benefited and customers have responded very positively to the near real-time support they receive. These satisfied customers are making it easier to expand to new clients, and PITT OHIO’s truckload carrier is now looking to adopt the same process automation.

**How Does It Work?**

Kapow automates multiple manual processes by mimicking real user interactions with websites, partner portals, emails and internal systems. Starting with the pickup request, Kapow reads each incoming email to extract shipment details—then logs in to the PITT OHIO scheduling system, navigates through its menus, and enters shipment details into the scheduling system. When the scheduling system responds with a pick-up time, Kapow captures the time from the web page, logs into the shipper’s B2B portal, and posts the time into the shipper’s portal—all automatically, within seconds of the initial email, not hours after the fact. Since shipper-owned portals do not provide APIs, Kapow’s unique ability to control the application’s user interface (UI) is critical to automating this process.
Kapow also provides automated updates whenever shipment status changes. For example, Kapow posts the vehicle location into each shipper’s portal by capturing database updates made by PITT OHIO’s GPS tracking application, logging into the shipper’s portal and updating the portal. 100% of this activity is automated—none of a CSR’s time is needed to handle routine events.

Kapow’s platform can utilize a user’s credentials to login to secured websites or portals, and it can navigate through any menus to extract data and enter transactions. It makes no difference where the application may be located: any reachable application can become part of an automated workflow. Kapow also reads or writes data from databases; for example, Kapow reads PITT OHIO’s fleet tracking database directly, transforms the data it extracts, and logs into the appropriate customer portal to update shipment statuses.

IT staff can create the necessary workflows collaboratively in only a few hours, by sitting with line-of-business users. With this approach, there is no need to retain outside consultants—so costs are contained and the organization’s process improvement agility is enhanced.

Recommendations to Build Efficiencies into Your Supply Chain and Logistics

The PITT OHIO story is just one example of the many ways Kapow improves efficiencies for transportation and logistics providers.

Below are three key strategic initiatives our customers have undertaken to sustain them in today’s economy and prepare for long-term growth.

1. **Improve DSO (Days Sales Outstanding).** PITT OHIO reduced its DSO by a full day with Kapow. By using Kapow to monitor dozens of freight bill payment portals, they’ve optimized the collections process enabling them to strictly enforce its payment terms.
There are multiple opportunities to apply robotic process automation in the order-to-cash lifecycle, and invoice monitoring is just one of them. Robotic process automation technology can integrate your internal systems with the business partner portals customer service reps access, enabling you to automatically extract shipping data and collect PODs and other scanned shipping documents, resulting in faster invoicing to any shipper. In the process of automating all business interactions, you will be alerted of disputes and freight charge discrepancies for faster follow-up, resulting in quicker payment and reduced DSO.

2. **Capture more work faster.** Transportation and logistics companies often bid on loads in a manual series of tasks as part of their business models. Manual access to emails and load boards is slow and inefficient—and loses business. Kapow’s integration and robotic process automation software helps 3PLs automate these repetitive business activities, allowing you to win more business.

3. **Provide superior service.** Just as PITT OHIO does, 3PLs and carriers need to provide shipment status to their customers. Carriers typically push status updates from their own internal systems directly onto shipper websites, while 3PLs often capture data from carrier sites and push updates to their own internal applications and the B2B portals or EDI interfaces they must support.

Automating these processes will increase shipment visibility, improve exception handling and reduce ongoing manual costs. Once automation is in place, you will have further opportunities to incorporate other shipment exception data into status reports—such as declined shipment tenders, missed pickups, transit delays, or notifications that an unloading has been delayed and detention is pending. These capabilities will all increase the value of your service, at minimal cost.

These are just a few recommendations that can help build better efficiencies into your operations and allow your business to grow.

**Maximize Growth & Profitability—Not Activities**

Uncertainty in the labor force, uncertainty of regulation, and uncertainty in the global market will all place additional stress on transportation and logistics providers. Forward-looking companies will seek to develop competitive advantage wherever it can be found.

By eliminating manual business activities through integration and robotic process automation with Kapow, direct efficiencies and cost savings are achieved in ways no other solution can deliver. This will allow staff to be redirected to more strategic work, such as:

- Business development
- Marketing and promotion
- Carrier development & procurement
- Customer bid responses
- Customer on-boarding & contracting
- Solutions design
- Continuous improvement

Whether your focus is revenue growth or margin improvement, Lexmark can help you achieve your goals—and help ensure your competitiveness—no matter how business conditions may change.