

From Cost to Growth Center:

**How a Packaging Manufacturer
Synchronized Multiple Plant
Locations, Production,
Distribution Center and
Transportation to Support
and Sustain 61% Growth for the DC**

Barriers to Growth

Our client, a packaging manufacturer with 9 separate plants in Wisconsin that serves Fortune 500 food and pharmaceuticals and many other recognizable brands, recently saw an uptick in customer orders due to new demand. At a major Distribution Center standing inventory for one plant grew 50% in 30 days. They went from needing 4.5 trailers per day to 6.5, inbound and were now running out of space to service customers because the distribution center was at 100% capacity.

But the need to optimize the distribution center for space (where most 3PLs would put their focus) was the least of their issues because the distribution center, production, and transportation at all 9 plants were not synchronized for future growth.

Customer Challenges

Limited Visibility & Fragmented Communication

This led to weekly production shutdowns and partial service to plants and customers despite growing demand

Low Inventory Accuracy

Inconsistent work processes and lack of check and balances resulted in lost sales

Misalignment Between Plants & Corporate

This means the manufacturer could not continually optimize production, distribution center and transportation to support each other's growth objectives

Action 1 Taken: Optimize for Growth vs. Only Managing Space

What we have learned is that continuing to add space and expanding the size or number of warehouses and DCs would only be a temporary fix for responding to customer demand. The manufacturer would not be able to support additional growth if they didn't address the underlying root cause as to why they weren't ready for accelerating customer growth in the first place.

Each function and plant were executing separately and each had their own processes, systems, technologies and reporting. Although they impact each other, there was no visibility of the gaps between raw product, in-progress product and finished goods because existing technology did not integrate their four (4) warehouse and transportation systems using EDI. This means each plant was blindly forecasting both inbound & outbound, leading to partial deliveries and partial service to the plants on a weekly basis. This impacted production lines also on a weekly basis as they experienced emergency out of stocks, line down time and production change over situations.

By using technology integration to synchronize each plant and create cohesive visibility across each step in the supply chain, the weekly service interruptions to plants and customers became almost non-existent, and instead 61% DC growth was achieved. Because of the visibility, standing inventory was no longer more than 30 days on fast turn items and 90 on slow turn, so the manufacturer no longer needed to pay for additional storage.

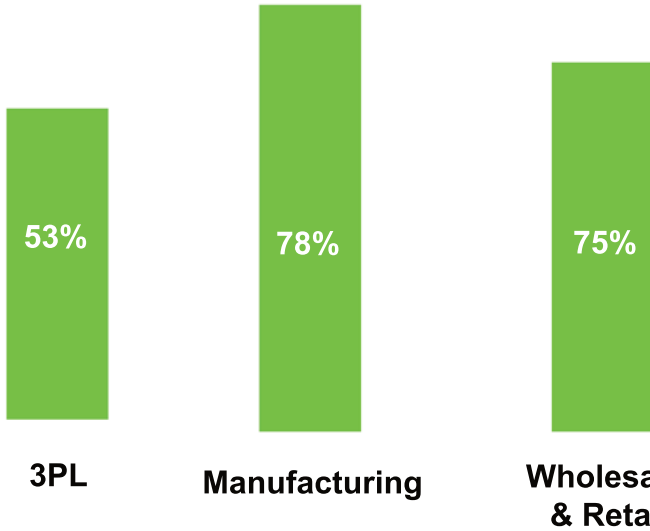


Source: Warehousing2018: Three Key Technical Trends Modex

Action 2 Taken: Align for Growth

Because 53% of 3PLs see the warehouse as a cost center, they are not focused on synchronizing inbound, production, warehousing and transportation. Because RGL understands that a bottleneck or a broken link will limit growth, we worked with the client to take a broader view of order visibility to understand how changes in warehousing, production and distribution operations will impact the other departments as well as their employees and customer's personally. While we acted as a driving voice of support for high-level issues such as national standardization and disruption risk management, the client had to execute on new work flows, identify new business initiatives, and align with IT on the new systems and interfaces required. This would allow them to uniformly measure impacts from shifts in shipment size or frequency, changes in piece/case/pallet identification and forecast how it will affect workflow efficiency, productivity and company growth.

% of Organizations Still Viewing the Warehouse and DC as a Cost Center



Source: Warehousing2018: Three Key Technical Trends Modex

Action 3: Optimize the Customer Experience to Sustain & Protect Growth

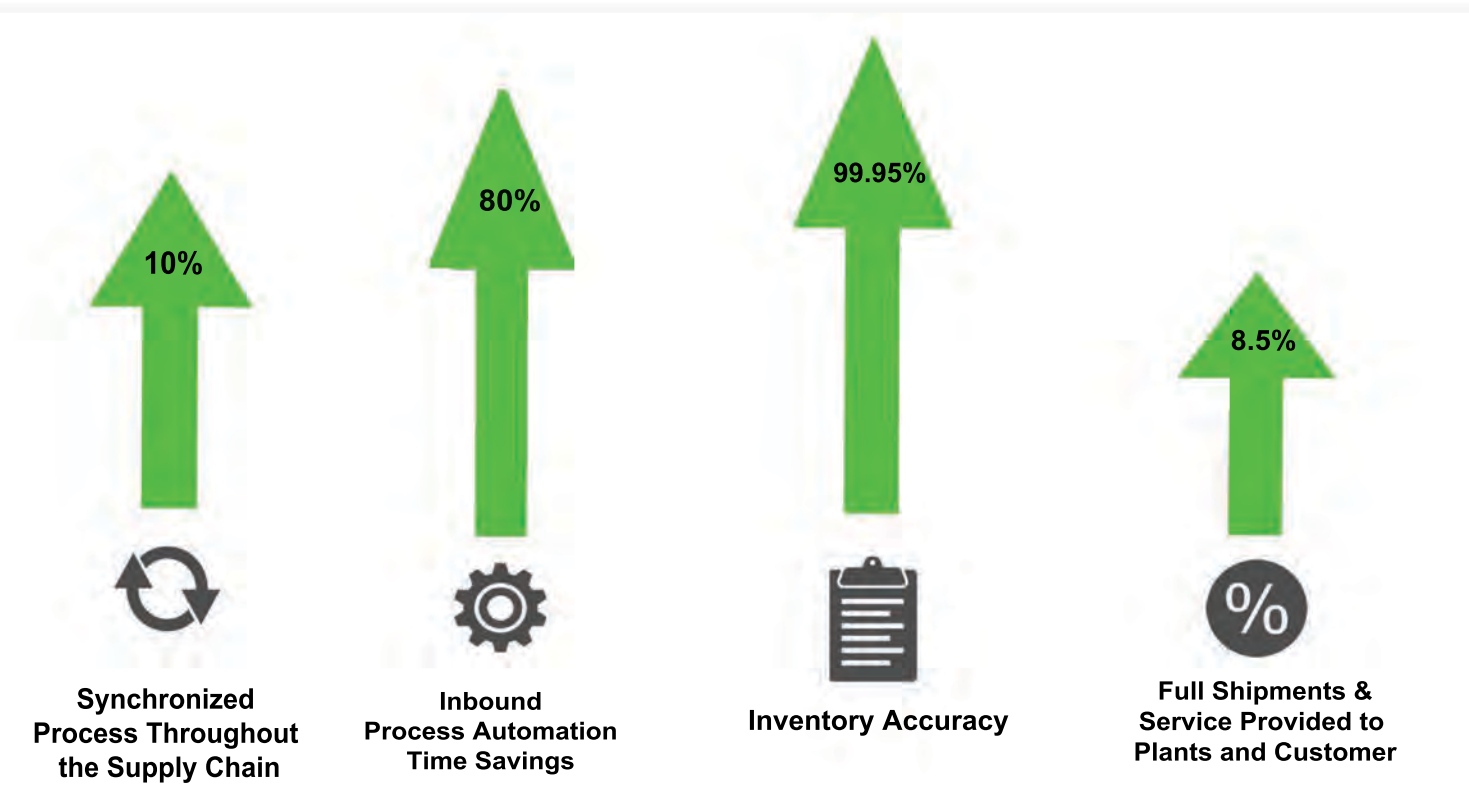
We have learned that when employees are under intense pressure to work faster to meet volume targets rather than working with improved work flows, error rates and safety risks tend to increase dramatically. As a result, downstream activities like staging and loading are negatively impacted and manufacturers become unable to protect their downstream customers from upstream error impacts in the distribution center or broader supply chain.

Like many other manufacturers, our client was experiencing profit margin deterioration and lost sales due to inventory inaccuracy. This put up to \$2.5M in annual sales at risk and added \$40k in expedited shipment cost at a crucial time when order volume was increasing and per-order value was decreasing. In addition to adding improved workflow processes, using a flexible WMS, the DC implemented count back methods to add a natural automated "check and balance" process with every order. Using technology with modular adaptability, automatic stops were set for orders that were not accurate, even detecting when the customer's pallets and number of products did not match. Inventory accuracy increased from 97.6% to 99.95%. As a result, the manufacturer's customers got exactly what was needed, increasing profitability and sales while creating tighter relationships with customers who are driving new growth

Inventory Accuracy Increased to 99.95% Increasing Sales by \$650K Annually

By implementing EDI and standardizing work processes, manual scanning was reduced resulting in cleaner reporting and improved customer service. In the past, seven items, including the bill of lading, item license plate, and item number, were manually scanned to enter an order. Errors were caught at time of order picking or at month end reconciliation. Today's process requires one scan, with all remaining data pulled into the transaction. When there's an issue with a pallet, there is now a 'pre-alert' rather than a 'late surprise' so that the team can react in a proactive and efficient manner. The changes reduce errors and delays in filling customer orders bringing the manufacturer closer to their customers.

Achieved Value That Led to 61% Increase in DC Growth



Future Opportunities For Growth

RGL believes 3PLs should be an extension of your team and a collaborative growth partner that helps your supply chain evolve and scale to meet your specific needs. We have worked with the manufacturer to identify next steps to further their objectives. Here are the additional growth opportunities that we look forward to exploring further:

1

\$250k annual cost savings by segmenting customer base and applying separate customer service policies. To determine appropriate cost for A, B, and C customer shipments.

Our client's flexible and responsive order policy allows all customers to place a same day shipping order up to 11:59 AM. The challenge is that not all customer profitability is equal and while this policy is perfect for some, it likely doesn't make sense for all. Because our client is not differentiating A, B and C customer shipments and segmenting them with appropriate cost and service levels. 40% of shipments are unnecessarily expedited. This is increasing annual transportation costs by \$250,000 for just one major location.

2

15% savings on transportation by synchronizing production planning & compliance with customer order expectations.

Production plants today are using distribution center arrival dates to plan production. This results in product not arriving until the day of shipment. Transportation cannot be planned until the product arrives causing 20% of outbound loads to be expedited, increasing transportation costs on these loads by 15-25%.

3

\$400K cost savings with increased routing guide compliance.

It is understood that there are challenges with routing guide compliance as 18th and 19th level carriers were being used. This means that there are productivity costs as 18 calls or emails were sent out before getting a carrier to pick up products. We estimate an annual opportunity cost of: \$400,000. Also, because carriers are being selected on price, not on schedules or carrier score card ratings, we find that it's creating dock congestion for both the manufacturers and for the receiving customers and it's leading to increases in damages or claims.

4

Stop missed deliveries and lower administrative costs 10-25% by synchronizing EDI to operations.

EDI industry standards recommend order updates in tight intervals from 5 to 15 minutes for guaranteed accuracy and order protection. Because the EDI provider charges "per order" in a non-scalable fashion, our client is pushed to reduce cycle times to contain hard costs. However, this is leading to 2-3 daily back orders, processing visibility gaps of up to an hour, and extra half-hour "manual" order reviews. Due to incomplete EDI set-up, many orders also require additional unnecessary 15-minute phone calls to confirm missing data. By utilizing a scalable, structured and priced EDI solution, the manufacturer can eliminate these challenges, reduce carrier detention fees, improve customer service and benefit from perfect order performance increases of 10 to 25%.

Unlike 50% of 3PLS managing warehouse, distribution and transportation for manufacturers. RGL has focused on synchronizing the chain for both growth AND cost reduction for more than 100 years. As a result, clients have seen 400% increases in inventory turns, 45% reduction in disruption risk and tighter relationships with customers as bottlenecks have been removed to give customers what they want, when they want it at the right price.