3PL collaboration: Supply chain success stories between shippers and 3PLs

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Abstract

Two compelling case studies address true shipper and third-party logistics (3PL) collaboration and what it looks like to get to a symbiotic relationship and mutualism. This is a place where true collaboration occurs, resulting in benefits of service, efficiency and balance of cost and profit for supply chain partners. In this paper are examples of how healthy conflict builds trust, especially when one party initially perceived a successful outcome as one-sided. The focus is on how collaboration among supply chain partnerships produces innovative solutions, more efficient operations, lower logistics costs and better service. The paper explores types of collaboration and when they work best, how to drive collaboration with customers and key outcomes of collaboration in consumer packaged goods (CPG) supply chains.

Keywords

3PL warehousing, CPG manufacturing, supply chain, strategic collaboration, tactical collaboration, partnership, collaborative innovation

WHAT IS SUPPLY CHAIN COLLABORATION AND WHY IS IT IMPORTANT?

Looking at a typical supply chain for consumer packaged goods (CPG), it is easy to see why collaboration among supply chain participants is important. The supply chains of the products we buy require complex orchestration from end to end — that is, from raw materials suppliers all the way down to the final consumer who ultimately purchases the goods (see Figure 1).

Successful collaboration among CPG supply chain participants — including the manufacturer, 3PL warehousing company and retail customer — is essential for products to flow efficiently through the supply chain, arriving in the right quantity, at the right place and on time.

Most CPG manufacturers outsource their logistics tasks to 3PL providers for the warehousing and transportation functions. Commonly there are separate providers for the warehousing services and transportation services. The 3PL warehousing provider is responsible for inventory management and order processing functions, while 3PL transportation companies are contracted to manage the movement of freight within the supply chain.

3PL warehousing providers receive goods, store them as inventory, pick orders and load unitised pallets of products for outbound shipment. Outbound orders for traditional CPG distribution are usually shipped to retail distribution centres, such as those for customers including Walmart and other major retailers.

Careful coordination of these functions is critical for the effective movement of goods and cost savings. Efficient supply chains result from collaborative efforts of supply chain partners.

TYPES OF COLLABORATION

Simply put, collaboration is working together toward a common goal. There are two types of collaboration among supply chain participants (see Figure 2):

- *Strategic collaboration*: Strategic collaboration drives meaningful improvement for the long run. Examples of strategic collaboration in CPG supply chains include the development of digital innovations to improve inventory accuracy, optimisation of distribution network capacity, and expansion of value-added services such as e-commerce and contract packaging services;
- *Tactical collaboration*: Teamwork that aims for improvement of day-to-day operations is tactical collaboration. Working together to smooth the flow of inbound receipts or outbound orders, communication of upcoming periods of peak demand and recommendations for stronger packaging materials illustrate tactical collaboration.

In what is the ultimate example of strategic collaboration, Whirlpool Corporation teamed up with Kenco Logistics to achieve collaborative innovation in its supply chain.

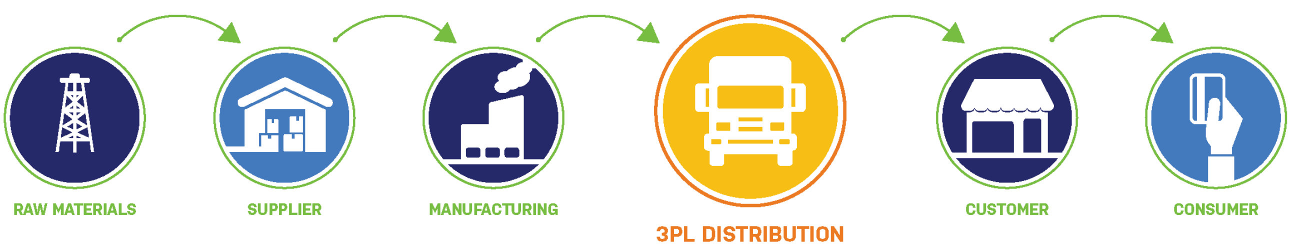

FIGURE 1: Flow of goods in supply chain
Source: The Shippers Group

FIGURE 2: Types of collaboration
Source: The Shippers Group

CASE STUDY: COLLABORATIVE INNOVATION IN SUPPLY CHAIN

Whirlpool Corporation is the number one major appliance manufacturer in the world with approximately US$21bn in annual sales and 70 manufacturing and technology research centres. Kenco Logistics is the largest privately held woman-owned 3PL in North America with US$680m in annual sales and just over 90 distribution centres, transportation centres and materials handling branches.

The challenge

Whirlpool wanted to improve inventory accuracy while reducing inventory management costs, but its legacy warehouse management system was highly customised and manual. Five specific goals for the project were:

1. Improve inventory accuracy;
2. Provide real-time visibility;
3. Reduce labour associated with cycle counting;
4. Eliminate physical inventory counts;
5. Digitise operations throughout the distribution centre.

The solution

Kenco implemented an automated inventory management strategy that involved digitised tasks and real-time labour management utilising computer vision technology. Kenco had not done this before and was partnering for the first time with a start-up Internet of Things (IoT) company from Dublin, Ireland. Whirlpool trusted Kenco's track record of innovation even though this was the riskiest project to date for Kenco's innovation lab, and its work would have significant impact on Whirlpool's distribution centres.

Kristi Montgomery, VP Innovation Research & Development Kenco Logistics, explained:

> 'What made this project unique was that Whirlpool was effectively buying an idea since the product had not yet been developed. There was a tremendous level of trust while the teams were learning and developing as we went along. It began with the end-state vision and a big bang approach.'

Full transparency was the key to forward progress with such an interactive and agile project management approach, since they were learning and developing on the fly. Open communication enabled conflict resolution, especially as scope creep became an issue, and sometimes these were tough conversations.

Involved were three partners each with their own strategic initiatives. Collectively they had to consider what all three were trying to accomplish.

Working with a start-up company in itself was a big risk for both Whirlpool and Kenco. When asked why Whirlpool chose to work with Kenco versus other partners on this opportunity, Brian Tomchick, Senior Manager Operations at Whirlpool Corporation, replied:

> 'Kenco had already done a great job on the base business and had a track record of great and innovative ideas. Having a trusted partner to do this with was important, particularly since the other partner was a start-up company.'

Montgomery said:

> 'Management of the project differed in that there was no standard process. It was a very untraditional process. This required teams to be in constant communication to ensure that we stayed on track. We had to figure it out and maintain alignment.'

She summed it up by saying: 'Innovation is failing fast, failing cheap, and iterating forward.'

One of the biggest challenges during the project was developing processes and systems to adapt to the reality of unpredictable Wi-Fi. Connection to the Internet 100 per cent of the time is impossible anywhere and especially inside a distribution facility. Setbacks and the attempt to overcome hurdles led to tremendous process improvement because people were taken into account.

'At Kenco, our purpose is to empower our people and customers with innovative solutions', said Kristi Montgomery, as she explained how when they pivoted to a phased approach to the project, they gained momentum by involving associates on the warehouse floor. Here we find an example of tactical collaboration. Learning what works best for warehouse associates and what can help them do their job better and easier was critical to the project's successful outcome. They celebrated quick wins which led to excitement, enthusiasm and acceptance — especially among those initially reluctant to change from more traditional inventory management.

The results

Ultimately the partners stepped back to a phased approach and delivered the first phase of digitised tasks and visual labour management. The key to making this happen successfully was fully involving the people who do the work in the solution creation. The results were:

- Seven per cent productivity improvement;
- Savings of over US$130,000 annually;
- Improved visibility and labour management;
- A fully engaged workforce.

FUNDAMENTALS FOR SUCCESSFUL COLLABORATION

Culture

Companies that collaborate effectively across the supply chain (see Figure 3) usually have a shared ethos and similar cultures. It is important that manufacturers partner with 3PLs which are aligned in their beliefs and values.

Strategic goal sharing

Each participant in the supply chain has their own strategic goals. Sharing goals helps partners understand the background and logic upon which decisions are made and builds respect for their partner's position regarding decisions, especially

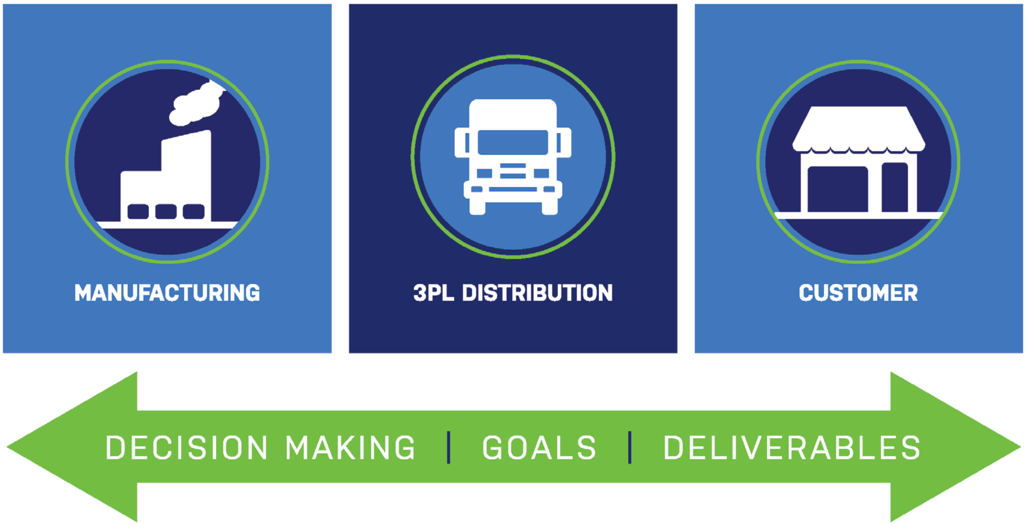

FIGURE 3: Precepts for supply chain collaboration
Source: The Shippers Group

when they are not fully in agreement. Partners might not agree, but if they are fully aligned, successful collaboration is still possible.

Measurable processes

Measurable processes make it possible to determine where potential problems are occurring and then take steps to improve the process. Manufacturers, 3PLs and customers each have a role in successful supply chains. A clear definition of their role and responsibilities, as well as accountability for their performance, is crucial.

Transparency

Honesty and transparency always provide a solid flow of communication, especially when challenges arise. Relationships among supply chain partners grow stronger when there is transparency.

Showcasing these fundamentals, Bush Brothers Company chose The Shippers Group (TSG) when launching a new distribution centre (DC) in Dallas, TX.

CASE STUDY: PROJECT PLANNING COLLABORATION TO OPEN A NEW DC

Bush Brothers Company is a leader in marketing branded, bean-based products. The 113-year-old family-owned company holds over 80 per cent market share of baked beans in the US and produces almost one third of all canned beans sold in the US. TSG is a 120-year-old, privately owned warehousing company which operates 16 distribution centres in six states, totalling 6.5m sq. ft of space. In addition to its warehousing services, TSG also provides e-commerce, contract packaging and transportation services.

The challenge

The desire to partner with a leading 3PL warehousing company in Dallas was based upon improving service to the region and reducing outbound transportation cost.

'Any project Bush Brothers undertakes aligns with their overall strategic plan and is supported by senior leadership — and choosing to add a distribution site in Dallas was no exception', explained Cathy Justice, New Products Supply Chain Integration at Bush Brothers Company.

The ideal 3PL warehousing partner would be very similar in its strategic approach to decision making and culturally aligned with Bush Brothers. There were many other criteria, but based upon these principles, TSG was selected as Bush Brothers' supply chain partner.

Hugh Tait, Senior Vice President of Customer Solutions at TSG, led the team from TSG and explained how measurable deliverables were important to maintain focus on the goal. With the goal of improving service and reducing outbound transportation costs, five measurable deliverables were identified.

- Improve customer service level to 99.6 per cent;
- Improve on-time by reducing lorry traffic congestion from the East Tennessee production facility;
- Lower transportation cost by US$600,000–US$800,000;
- Manage 75 per cent of inbound shipments on rail versus lorry;
- Increase Bush Brothers supply network capacity.

The solution

How they got there starts with the priority management process. 'We are a very collaborative company, so there were multiple on-site meetings for planning by implementation teams across functional areas of both companies', said Justice, as she began to explain the priority management process. Bush Brothers routinely uses Priority Management's Project Planning Breakthroughs — a process that begins at the *end* and works backwards to the *start*.

The Bush Brothers team introduced TSG to this collaborative approach to ensure proper milestone planning for an on-time start-up of the Dallas DC. Functional teams from both companies met at Bush Brothers' headquarters in Knoxville, TN, led by a facilitator trained in the Project Planning Breakthroughs Process, who guided the teams through the process.

The process is collaborative and fully transparent. It creates ownership because team members are involved in creating the plan, which helps everyone involved understand the importance of the predecessors of tasks. It facilitates relationship building and enables open communication and better change management, because team members can literally see the big picture unfold. Milestone dates were uploaded to supporting project management software and weekly project meetings helped keep everyone on pace.

Figure 4 illustrates the collaborative approach, which starts at the end on the right, ie 'go live', and works its way backwards to the start on the far left. The red line is the critical path to ensure a warehouse full of inventory and systems ready. The entire project was 21 weeks from start to completion.

Hugh Tait used the same airport analogy the facilitator gave to provide a simple example of how the process works:

> 'When you have a flight to catch, you usually plan the events leading up to

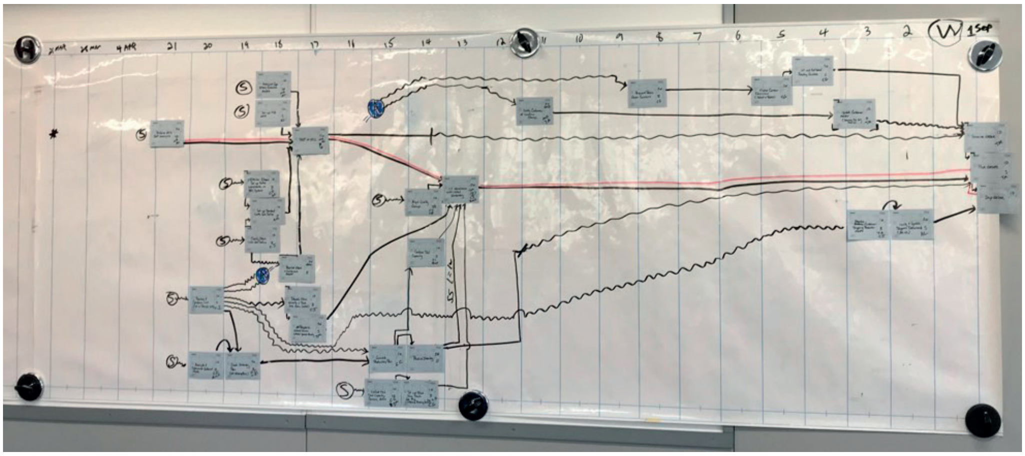

FIGURE 4: Project Planning Breakthroughs process for opening new DC
Source: The Shippers Group and Bush Brothers Company

> the flight based first upon the boarding time and work your way backwards, such as time to board, time get to security, time to arrive at airport, time to leave house, time to pack, etc. You get the picture.'

Bush Brothers' and TSG's collaboration takes a clearly defined goal and makes teams think differently about how they are going to get there. The process enhances communication and lends itself to being fully transparent, because one cannot omit tasks and still meet the goal. It involves people who are responsible for specific tasks identifying the predecessors and each holding the other accountable.

The results

There were not any major challenges driving to the go-live date. The time invested in building the relationship along the way was helpful to maintain alignment whenever there was an issue. The results were on-time start-up and attainment of deliverables.

One lesson learned was that teams realised they did not consider things that could happen after go-live in the project plan that could adversely affect warehouse operations. For example, what do you do when lorries routinely do not show up on time or the percentage of case pick is much greater than forecast? Strong relationships made candid conversations easier, leading to better understanding as well as fast and full resolution of the matter.

BENEFITS OF COLLABORATION IN SUPPLY CHAINS

Collaboration is ultimately about communication and with open communication among supply chain participants, every stakeholder has a voice. Successful collaboration within the supply chain builds trust and can also deliver other substantial benefits.

1. *Efficiency and productivity*: Manufacturers and 3PLs that communicate effectively have enjoyed dramatic improvements in efficiency and productivity, helping to improve storage density and inventory management and to control labour.

By collaborating with one of their CPG customers, TSG was able to improve storage density in the warehouse, eliminate extra handling and reduce storage and handling charges for their customer.

In this situation, the customer's product was being manufactured onto a pallet configuration designed to maximise cube utilisation on lorries. Upon arrival at the distribution centre, two layers had to be removed from pallets and transferred onto another pallet. This required extra handling and labour that was billed back to the customer. Additionally, this also resulted in partial pallets in the warehouse which significantly reduced storage efficiency and increased the manufacturer's storage costs;

2. *Fewer service failures and improved KPIs*: Key performance indicators (KPIs) (see Figure 5) are about accountability and they enable faster results. Teams that work together to decide what to measure and how to measure results are more successful toward meeting specific objectives. Attaining goals for specific KPIs can create exceptional customer experience and joint profitability.

   Canned fruit products of one importer landed at their Pennsylvania distribution centre before eventually shipping intermodal to Atlanta to better service customers in the southern region of the US. Initially, an average of 20 loads arrived at the Atlanta distribution centre every Thursday and Friday, which was also the importer's heaviest outbound shipping day from Atlanta, DC.

   To compound the issue, outbound order volume from week to week was erratic. This often created a bottleneck of receiving and shipping and labour planning was challenging. As a result, the KPI for inbound receipt fell below target. When the 3PL warehouse, the importer and their intermodal carrier came together, they collectively came up with a mutually beneficial plan for a new schedule. Inbounds to the Atlanta distribution centre were spread out over the week with a higher concentration of inbounds on Monday and Tuesday. This made for less congestion at both the Pennsylvania (outbound) and Atlanta (inbound) distribution centres, and the Atlanta warehouse was able to meet the target KPI for inbound receipt based upon its service level agreement (SLA) with the importer.
3. *Best practices*: Collaboration among supply chain stakeholders often leads to exceptional outcomes from sharing operational best practices. When the manufacturer and its 3PL warehousing partner work together doing things such as documenting and understanding standard operating procedures (SOPs) and finding ways to eliminate waste through lean processes, operating efficiency improves along with employee satisfaction, customer satisfaction and profitability. Supply chain best practices should also focus on talent acquisition, associate development, diversity and inclusion, innovative technologies, green initiatives and social responsibility (see Figure 6).
4. *Flexibility and continuity*: Tactical collaboration is a means to stability and flexibility. Customer requirements for on-time delivery, availability of carriers, economic conditions, order volume and many other factors have an impact on supply chain dynamics. Agile supply chains that enable manufacturers and 3PLs to

FIGURE 5: KPIs in 3PL warehousing
Source: The Shippers Group

STANDARD OPERATING PROCEDURES
LEAN PROCESSES
TALENT ACQUISITION
ASSOCIATE DEVELOPMENT
DIVERSITY AND INCLUSION
INNOVATIVE TECHNOLOGIES
GREEN INITIATIVES
SOCIAL RESPONSIBILITY

FIGURE 6: Best practices of lean and innovative 3PL warehouses
Source: The Shippers Group

adapt quickly are crucial to effectively respond to constant changes.

Additionally, supply chains must be reliable, predictable and capable of delivering during an unplanned disruption of service.

As the US went on lockdown during the initial outbreak of COVID-19, consumers began to panic buy toilet tissue, canned goods and other food and consumer packaged goods. This presented countless supply chain challenges to the manufacturers of these goods. At the onset of the pandemic, third-party warehouses had to react quickly to tremendous spikes in the volume of goods shipping outbound to retail grocery customers. As inventory was depleted, this presented new issues for supply chains. Manufacturers rushed to ramp up production to meet consumer demand and some 3PLs temporarily found themselves with empty warehouses.

Many manufacturers relied on contingency plans to get products quickly to their retail customers and decided to ship their goods straight off production lines direct to retail customer, therefore bypassing their 3PL distribution partners. This created a revenue shortfall for 3PL warehouses, but less so for those supply chain partners which were willing to collaborate during these unprecedented times.

In one instance, an agreement between a manufacturer and its 3PL warehouse partner eased the burden for both companies. The manufacturer was sensitive to the need of its warehousing partner to generate storage and handling revenue, but wanted to ensure space availability when they were able to build inventory again. The two companies agreed upon a plan that enabled the 3PL provider to sell the space (otherwise normally used by the manufacturer) on a short-term basis, while the manufacturer paid the 3PL a monthly minimum to guarantee a specific amount of space would be available when it was time to resume building inventory. This proved to be a win-win situation for both companies.

5. *Lower costs*: A real partnership model of collaboration ensures the flow of information that aids decision making. Companies that collaborate effectively across the supply chain improve service, improve efficiency, improve customer satisfaction, reduce inventory and ultimately reduce costs.

HOW TO DRIVE COLLABORATION WITH CUSTOMERS?

Top-to-top conversations

These may be structured conversations during quarterly business reviews focused on more strategic issues or unstructured conversations at various levels within the organisations more likely dealing with tactical day-to-day matters.

Listen

Train team members to pay close attention to customer pain points and visualise where they may have gaps that your team can help fill.

Know your customer

Some customers are open to change, while others are only willing to participate in what is tried and true. Ask questions to gauge your customer's comfort levels and willingness to experiment with new solutions.

KEY TAKEAWAYS

- *Win–win*: Ensure all parties benefit and, when necessary, spend time on contractual arrangements to ensure equal sharing of risk and reward;
- *Patience and perseverance*: Leads to success in innovative collaboration. Sometimes setbacks lead to great things;
- *High levels of engagement*: Successful collaboration is the result of engagement by all stakeholders. Commitment of the same resources over time creates a crucial cohesiveness;
- *Flexibility*: The ability to pivot and get quick wins builds confidence and trust in new processes;
- *Clearly defined goals*: Clear goals allow stakeholders to monitor their progress and are motivating;
- *Measurable deliverables*: Having quantifiable results that successfully complete a project milestone helps keep things on track;
- *Cultural fit*: Cannot be overemphasised. Cultural compatibility is crucial to collaborative success;
- *Strategic goals*: Strategic goal sharing helps partners understand the background and logic upon which decisions are made.

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