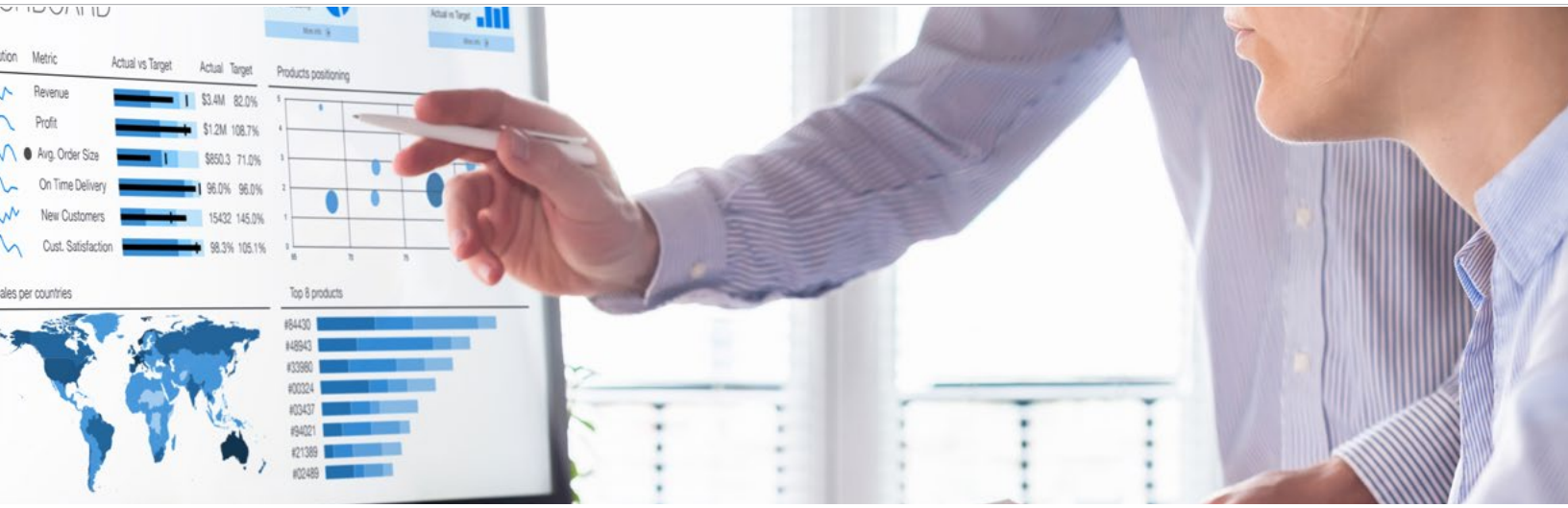
One Network Enterprises™

# HOW TO IMPROVE COGS HORIZONTALLY ACROSS THE SUPPLY CHAIN

## Drive value for you and your network of trading partners and achieve least landed cost

by Joe Bellini




**Customer demand is power.** This power has been used to negotiate pricing from a purchasing perspective for many years. However, as we experienced in the pandemic, this power was short-lived without visibility and control across all trading partners through the supply chain network, where each participant plays a role in making and delivering product for the end consumer.

In the past, this problem was more manageable as retailers and brand owners also owned the upstream assets to create products. Today, most demand is owned by the retailer, the brand owner, or the e-marketplace consumer from an omnichannel perspective (depending on how retail or the omnichannel is structured). The balance of the supply chain network is outsourced to trading partners.

**Retailers and brand owners continue to strive for reductions in landed costs.** Given they no longer carry the inventory, carry the capacity, or control the assets in general, how then can they influence the landed cost?

One way is through mandate. Walmart recently imposed a requirement for 98% On time In Full (OTIF) compliance, where a violation has the supplier potentially hit with a 3% COGS chargeback. This level of performance (as compared to typical industry performance which is in the 80's) would drive additional revenue and margin per square foot at the shelf, along with reducing the days of supply required to keep the shelves fully stocked.

The problem here is that the supplier base views the mandate by Walmart as cost-shifting to where they will need to carry more inventory for a higher mix of products than in the past, along with absorbing expedited and premium freight costs to better manage demand and supply variations.

On a network the opposite is actually true. Take, for example, the proven case study of large CPG manufacturer who was meeting retail service level needs by carrying 65 days of supply from the shelf upstream through manufacturing, which is typical of most large CPGs. This firm planned and scheduled using the typical static lead times for both orders and logistics that are part of an ERP deployment. In addition, there was significant information latency among trading partners, given that everyone wanted to run a local optimization prior to passing new data/information to the next node.

In this typical network, there are 21 competing optimizations running from the end-consumer upstream through the supply base, as seen in Model X (see figure 1). Promotional in-store/in-stock was only running at 80% and with 40% of revenues being driven through promotions. The opportunity for improvement was tremendous.

When this trading partner ecosystem was migrated onto One Network, the results were impressive. Promotional in-stock rose to 99%, thus achieving significant value as compared to the prior 80%. And this was achieved while also lowering inventory from 65 days to 25 days, as well as reducing the number of planners from 13 to 6.

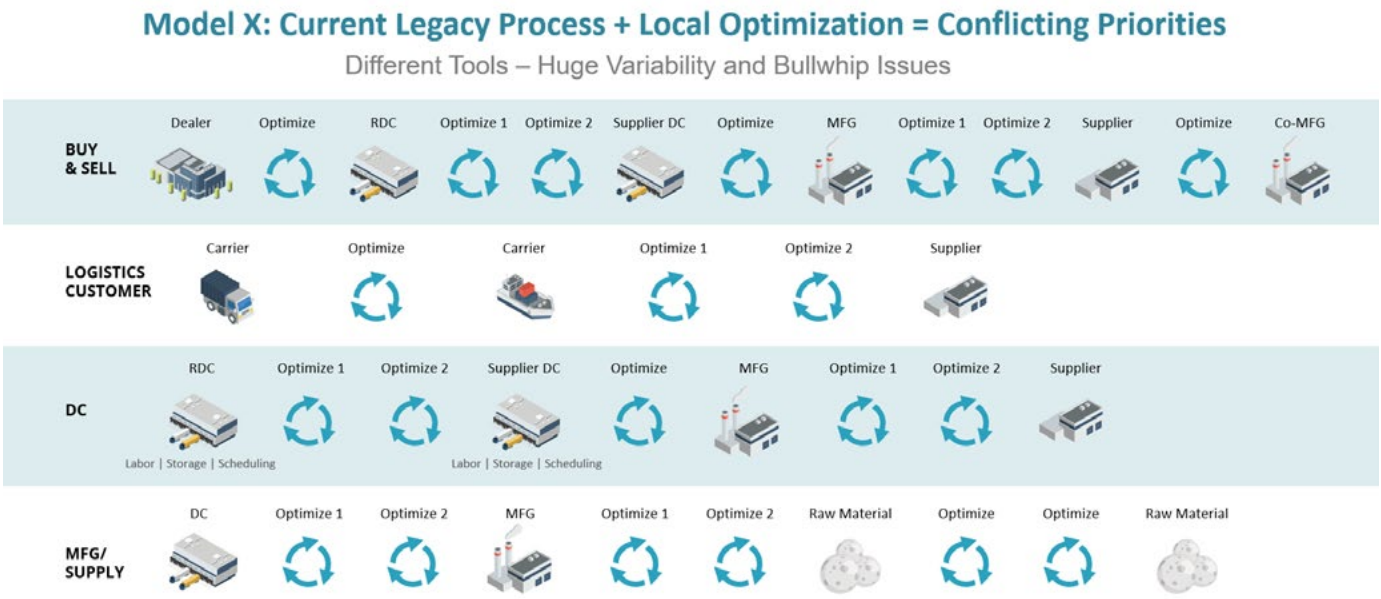



**Figure 1: Model X with ERP deployments, information latency between trading partners, and local optimiztion.**

**The only way to improve and reduce least landed cost while increasing customer service levels is to move to a network.** Otherwise, even though you may own the demand, without a real-time demand driven trading partner ecosystem across the network, you will not be able to collaborate with trading partners across planning, scheduling, and execution processes. These trading partners now own the COGS, and thus are the only ones who would be able to effect real cost savings.

Let's look at an example in the food industry. Some of you may remember the movie *Trading Places* where the commodity trading was focused on frozen concentrated orange juice. Why does frozen concentrated orange juice average about 2.38/lb at retail between branded and white label?  All we need to do is look upstream in the supply chain to see the cost build up per supply chain network.

As the retailer/brand owner you seem to have all the power. However, in looking at the value chain, you are somewhat limited to purchasing negotiations, base, lift, G&A, some marketing/advertising and your markup. If you just try to squeeze your upstream trading partners through purchasing, are you really driving long term and sustainable value across your partner ecosystem?

Bringing your trading partners onto a demand driven real-time network is only real way to amplify your power of demand. In one fell swoop you can eliminate all the information lead times, local decision making, second guessing, and bullwhip effect which is a result of Model X.

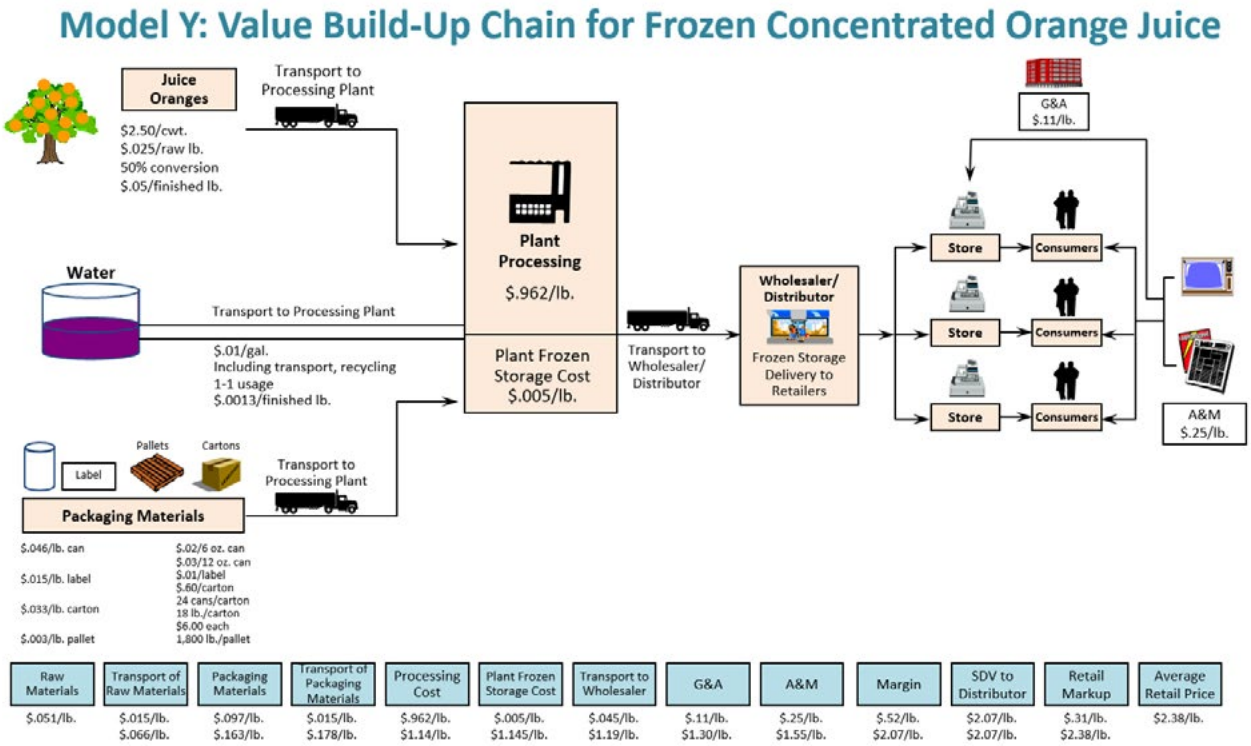



**Figure 2: Model Y with trapped value in the network.**

In our food network (Model Y), the upstream cost/lb totals $1.19. At $2.07/lb in cost prior to markup at retail, this represents a whopping 57% of the cost.

**Your ability to control Cost of Goods Sold (COGS) now extends upstream through your entire supply chain network.** This is network opportunity. The power of demand must move past procurement/ price negotiations and into driving an ecosystem for trading partners across a real time demand driven supply chain network.

The earlier CPG example, where inventory dropped from 65 days to 25 days as service levels increased, is directly applicable to our foods example here. The costs of excess inventory, lead times, capacity utilization, expediting, waste, etc. are all trapped in the $1.19. The impact of the inventory reductions alone can have a significant impact on this number. Retail markup is 31 cents. At just a 10% improvement on the $1.19, this generates 12 cents in savings. If half is shared with the trading partners and half with the retailer, this 6 cents for the retailer increases margin by almost 20%!

## In Summary

We have learned many things about supply chain network resilience, business continuity, and operational readiness as a result of the pandemic. However, as we look deeper, the loss of visibility and control is just part of the problem. The ability to create a winning scenario for all the trading partners in our ecosystem is really the end game we should strive for, along with resource sustainability. Understanding your horizontal cost of goods sold and how to apply a real time demand driven supply chain network end-to-end is the only way to generate shared value for all trading partners.

## About the Author

Joe Bellini is certified in AI/ML from the MIT Sloan School, is an alumnus of Harvard Business School, and holds degrees in Applied Mathematics and Statistics and Mechanical Engineering. He is a past award winner in the Mathematics Olympiad competition, authored the patent for Extended Enterprise Planning across a Supply Chain, and has been listed by Supply and Demand Chain Executive Magazine as a “Pro to Know” for the past 2 years.

*"If you have 200 co-manufacturers, who's the enterprise?*
*If you have 800 suppliers, who's the enterprise?*
*If you have 1000 distributors, who's the enterprise?*
*If you have 600 carriers, freight forwarders, and customs brokers, who's the enterprise?*
*You need a network platform to solve today's business network problems. Enterprise thinking is over."*

## The Old Way

**In the past, companies owned their products and their supply chains from start to finish. This gave companies complete visibility and control over the entire supply chain. The problem was, it was highly inefficient as companies had to master, manage, and maintain a host of disparate capabilities and facilities, from mining and processing raw materials, to managing factories and production lines, to shipping product and staffing stores.**

## The New Way

**As products grew more complex, companies soon learned that other firms could do a better job in some parts of the complex manufacturing process, so they outsourced parts of the process, such as materials, processing, manufacturing components and other services like packaging. This enabled them to get a better product, quicker, and at lower cost.**

**However, as companies outsourced farther afield internationally, supply chains stretched across the globe, introducing longer physical and communication lead times. Businesses lost visibility and control over their longer, more complex supply chains, making them opaque, inefficient, and brittle. Supply chains now often involve thousands of parties, are multi-national, are impacted by tariffs and regulations, and are more vulnerable to disruption. So, while companies have cut costs in production, they have added costs in logistics (including expedited freight) and inventory to cushion against uncertainty. And the increase in disconnects and lack of visibility has lead to dislocations between supply and demand.**

## The ONE Way

**One Network Enterprises (ONE) allows companies to "have their cake and eat it too." With a multiparty real-time business network and the industry's only fully integrated data model, companies can outsource to gain specialized components and services, lower costs, and eliminate inventory buffers, but at the same time retain complete visibility and control end-to-end across all tiers. It's as if you still owned your entire supply chain and your suppliers and manufacturers were just across the street.**

**Strengthen your Balance Sheet and Improve your P&L with a network strategy. Achieve cost reductions across the network with supply-demand matching and optimized inventories across every node, to achieve superior service level targets and greater revenues at the lowest landed cost.**

## ABOUT ONE NETWORK ENTERPRISES

One Network is the leader in intelligent control towers for autonomous supply chain management. From inbound supply to outbound order fulfillment and logistics, this multi-tier, multiparty digital platform helps optimize and automate planning and execution across the entire supply network and every trading partner. Powered by NEO, One Network's machine learning and intelligent agent technology, real time predictive and prescriptive analytics enable industry-leading performance for the highest services levels and product quality at the lowest possible cost. It's the industry's only solution with a fully integrated data model from the consumer to suppliers and all logistics partners, providing a network-wide, real-time single version of the truth. Leading global organizations have joined One Network, transforming industries like Retail, Food Service, Consumer Goods, Automotive, Healthcare, Public Sector, Telecom, Defense, and Logistics. Headquartered in Dallas, One Network has offices across the Americas, Europe, and APAC. Learn more at www.onenetwork.com.

One Network Enterprises™

**US Corporate Headquarters**

4055 Valley View Ln, Suite 1000
Dallas, TX 75244

+1 866 302 1936 (toll free)
+1 972 385 8630
inquiries@onenetwork.com
www.onenetwork.com

**One Network Europe**

Park House
116 Park Street
London, W1K 6SS

+44 (0) 203 28 66 901
europe@onenetwork.com

**One Network India Pvt Ltd**

Westend Centre III, Survey No. 169/1,
Second Floor, South Wing, Sector 2
Aundh, Pune 411007, Maharashtra, India

+91 20 49111800
indiasales@onenetwork.com

**One Network Australia/Asia-Pacific/Japan**

+61 401 990 435
cedwards@onenetwork.com