



## Supply Chain Transformation & Optimization

### Project Overview

Due to a harsh downturn in economic conditions, a global Fortune 100 heavy equipment manufacturing company was challenged to streamline fragmented raw material networks in the company's U.S. Midwest flow. CGN Global was asked to partner with their large distribution network to provide assistance, design and launch a raw material hub. The client encountered a U.S. regional supply base consisting of 100 raw material suppliers, a 5 hour travel radius from the proposed Midwest location and \$70M annual spend. A majority of the client's annual spend came through only 15% of their supplier network, and over 1,700 part numbers required consolidation.

### Business Objectives

CGN Global's primary objectives were to optimize intermodal transportation, consolidate period cost, and reduce transportation cost, by having regional raw material suppliers ship all castings to a centrally designated facility. The CGN Global team was asked to deliver superior business results through cost efficiency and consolidation, and to drive integration and improvements through material supply processes, delivering raw materials throughout North American facilities on time.

### Unique Challenges

CGN Global was confronted with multiple challenges including:

- Manufacturing facilities individually sending demand signals to raw material suppliers
- Duplication of resources and an increased complexity in process, along with antiquated ERP systems
- Hostile work environment
- Challenged optimizing freight consolidation
- Define quality inspection points
- Select pilot suppliers and part numbers that can represent overall weight and cost

### CGN Global's Approach

An in depth thought process led to CGN Global developing an approach that would identify the current state of part number utilization, suppliers, demand and costs, to design the pilot and stress test supply chain processes, using sample parts from a local key manufacturing facility. Additional responsibilities laid out in CGN Global's approach involved, determining interplant transfer costs, a complete transfer of existing purchase orders, conducting supplier assessments & development, identifying deployment processes and requirements of each function (Releasing, Purchasing, Logistics, IT systems and Accounting), identifying

manpower & material storage requirements along with providing a flexible financial model, complete with assumptions and analysis. Several conditions the team had to integrate into the redesign included; leveraging existing parts & operations, maintaining regional suppliers to ship directly to manufacturing facilities, defining ownership during shipment and consolidating demand signal. Lastly, the team developed and transitioned the remaining in-scope raw material part numbers to the raw material hub management.

### Results & Conclusions

Through a diverse and extensive approach, CGN Global cultivated excellent results:

- Successfully designed, and launched raw material hub pilot and set up for full-blown deployment
- Within 30 days of the pilot program, achieved 91% on time delivery.
- 75% Reduction in headcount from 12 to 3
- Acquired operational efficiency improvement for visual quality at point of receipt

### Our Expertise

At CGN Global, we can transform supply chain operations from a potential liability into an asset that rewards your business. CGN Global has decades of experience working with our clients to quickly ascertain client situation, provide courses of actions, build long-term international strategies and relationships which optimize vertical integration to maximize client profitability. CGN Global's supply chain expertise includes:

- Systematic Understanding of Customer Value
- Drive Step Change in Product Value Creation
- Maximize Component Shipping Performance
- Improve Demand & Inventory Management
- Transform Supply Base and Partnership Strategy

cgnglobal.com

**Paul Ahn**  
Senior Consultant  
Tel.: 314.913.5544  
[paul.ahn@cgnglobal.com](mailto:paul.ahn@cgnglobal.com)

**Rick Nieves**  
Principal  
Tel.: 312.833.0389  
[rick.nieves@cgnglobal.com](mailto:rick.nieves@cgnglobal.com)

