

ARC BRIEF

By ARC Advisory Group

JUNE 2004

Operational Excellence in Inbound Logistics: A Strategy for Profitable Growth in Retail

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Executive Summary

How do you grow profitably in the retail industry while outperforming the competition and enhancing customer loyalty? This is the burning platform that most retailers face today. As the competitive landscape intensifies and supply chains become more global, dynamic, and complex, remaining at the status quo is not an option.

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Retailers must continuously measure, analyze, improve, and control their processes in order to respond effectively and efficiently to changes in the market. Achieving operational excellence is not a destination; it's an ongoing journey.

Inbound logistics has a significant impact on financial performance and customer satisfaction; hence it's becoming an area of focus for most retailers. Operational excellence in inbound logistics can be defined as the efficient and cost-effective flow of goods and information—across multiple parties (vendors, customs, transportation providers, etc.) and intermediary points (consolidation/deconsolidation centers, cross-docks, distribution centers, stores, etc.)—from product source to consumer.

Achieving operational excellence in inbound logistics, however, is becoming increasingly challenging due to global sourcing, poor visibility to orders and shipments, and other factors.

Considering the distributed nature of retail supply chains, retailers are no longer masters of their own destiny; they're ultimately dependent on their logistics partners for success, partners that can facilitate the flow of goods and information from the point of origin to final destination.

This paper will highlight the challenges and opportunities facing the retail industry, with particular emphasis on inbound logistics and the role of logistics partners. Three case studies are also provided to illustrate how retailers are driving continuous improvement and achieving operational excellence.

The Burning Platform

Competition in retail continues to intensify. Mergers and acquisitions are creating more powerful and global players, while new and traditional retail segments (mass merchants, drugstores, specialty, dollar stores, warehouse, grocery, and online retailers) are beginning to offer similar products and services. In fact, the market share of the top 10 retailers increased from 23 percent in 1997 to over 29 percent in 2002.⁴

“To grow profitably” is a common goal amongst retailers, but price discounts and promotions are keeping profit margins relatively low (under 3 percent on average). Therefore, considering the downward pressure on prices, the most significant way that retailers can improve their margins is by improving their productivity and reducing costs.

But retailers also recognize the importance of top-line growth, hence their renewed focus on customer service and retention. The cost of losing a customer forever due to poor service (negative shopping experience, out-of-stocks, etc.) can negate all of the savings achieved elsewhere.

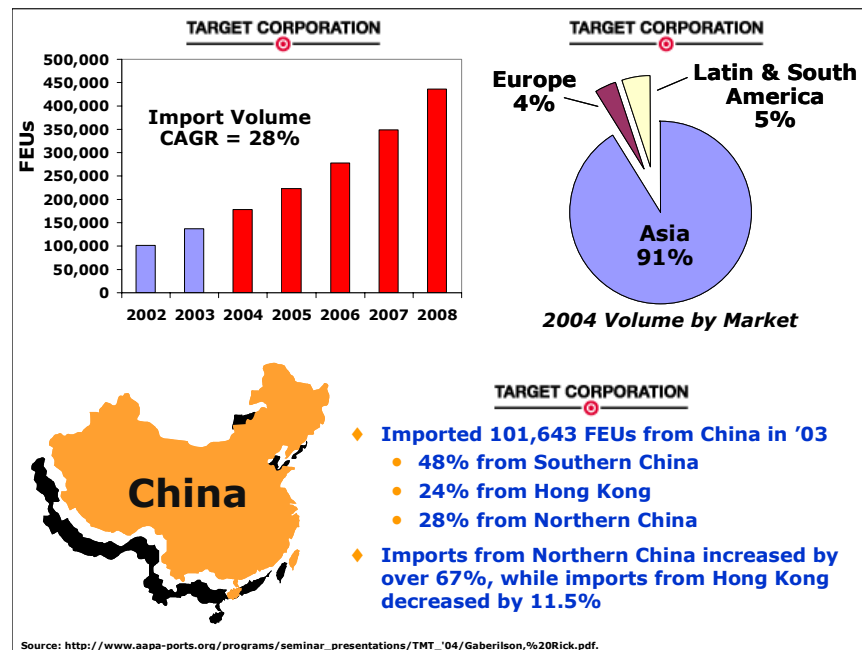
	<p><i>In an environment where many retailers are selling the same products for about the same price, retailers have to be creative and find new ways to compete. Providing the best shopping experience and service to customers is the ultimate goal.</i></p>
<p>Charles Scheiderer, Senior Vice President, Logistics¹</p>	
	<p><i>The most overriding trend in retail today is the refocus on the customer—where it should have been all along.</i></p>
<p>Lisa Harper, Chair and Chief Executive Officer²</p>	
	<p><i>At Saks, we're rolling out a new concept for point of sale; rather than calling it point of sale, we're calling it point of service.</i></p>
<p>Bill Franks, Executive Vice President and Chief Information Officer³</p>	
<p>¹Paraphrase from speech given at Retail Industry Leaders Association (RILA) Logistics Forum, January 2004 ²Point of View: Retail Horizons Executive Roundtable, BearingPoint, 2003 ³ Ibid</p>	

Renewed Focus on “Serving the Customer”

⁴ “2004 Global Powers of Retailing,” Deloitte Touche Tohmatsu and STORES Magazine

The Inbound Logistics Landscape

Retail supply chains are becoming more global and distributed. In order to compete effectively on price, retailers are sourcing products from all over the world. Target Corporation, for example, imported over 137,000 FEUs (forty-foot equivalent units) in 2003, mostly from Asia. The company expects to import over 223,000 FEUs in 2005, an increase of almost 63 percent in just two years.⁵



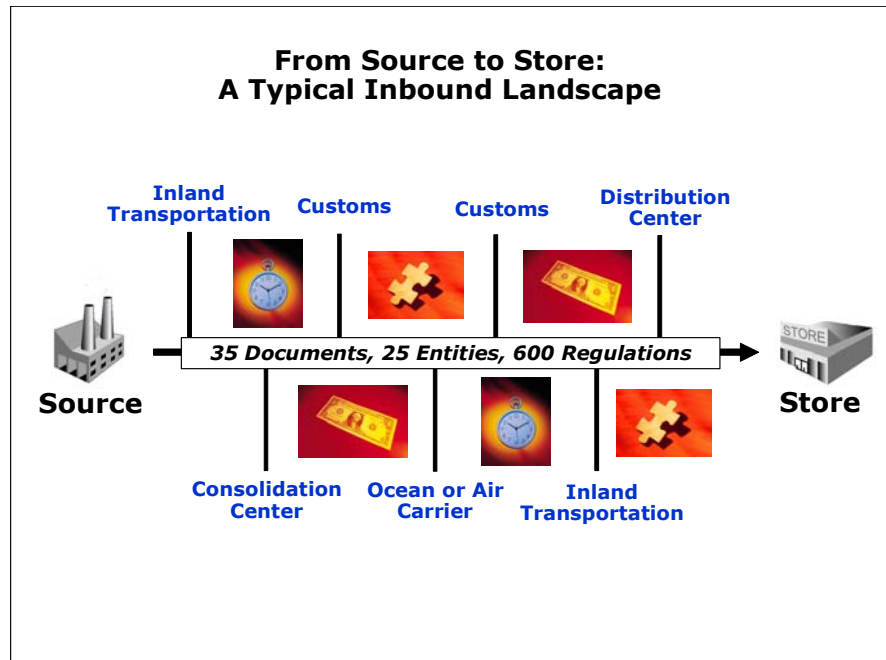
Global Sourcing at Target Corporation

Globalization, however, introduces additional layers of complexity and constraints, such as the need to:

- Accurately complete and file about 35 documents;
- Interface with about 25 parties, including customs, carriers (across multiple modes), freight forwarders, and banks;
- Comply with over 600 regulations and 500 trade agreements which are constantly changing;
- Deal with multiple currencies, languages, and time zones;
- Mitigate the impact of increased cycle times.

⁵ http://www.aapa-ports.org/programs/seminar_presentations/TMT_'04/Gaberilson,%20Rick.pdf.

In addition, retailers typically employ multiple distribution strategies to move product from source to final destination, each with its own unique challenges and requirements. For example, Direct to Store Delivery (DSD) is becoming increasingly popular, especially for distributing goods with short lifecycles.



Each Node Adds TIME, COST, & COMPLEXITY

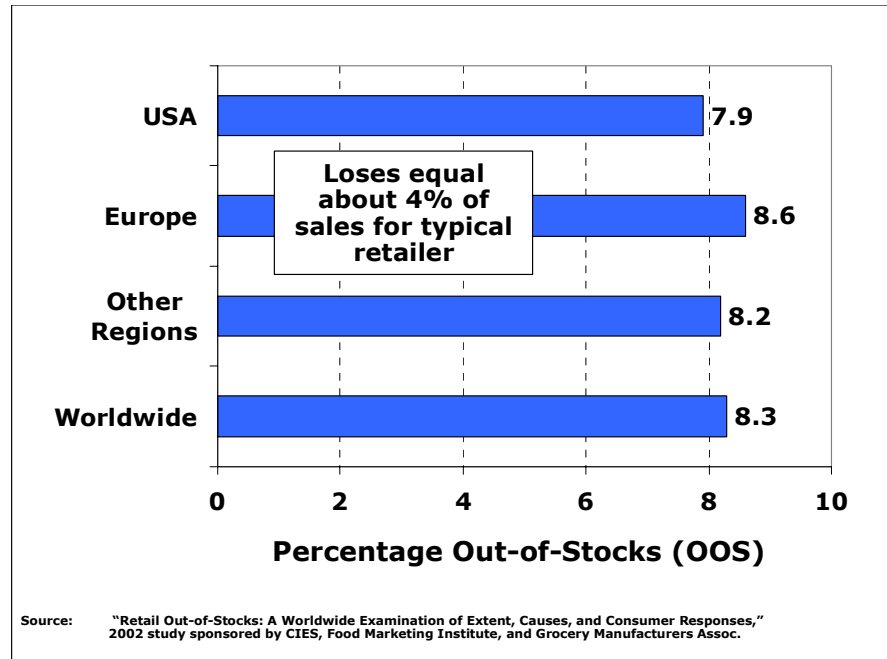
Briefly stated, responding to changes in supply and demand without increasing inventory or hurting customer satisfaction is the challenge that most retailers face today. The lack of visibility to inbound shipments, coupled with poor collaboration amongst shippers, carriers, and consignees, results in very inefficient receiving processes at both the DC and store level.

A key symptom of inefficiency is out-of-stocks (OOS), a measure how well a supply chain is able to deliver the right product, at the right time, to the right location or customer.

When a customer encounters an out-of-stock situation, the retailer is unable to capture revenue about 55 percent of the time because the customer does not purchase the item, delays the purchase, or buys the item at another store.⁶ However, the cost of potentially losing that customer forever and

⁶ “Retail Out-of-Stocks: A Worldwide Examination of Extent, Causes, and Consumer Responses,” CIES- The Food Business Forum, Food Marketing Institute (FMI), Grocery Manufacturers of America (GMA)

the diminished brand exposure is even more damaging, especially when you consider that in 25 percent of OOS situations the product is already at the store but not on the shelf.



OOS Result in \$Billion in Lost Sales

Finding new ways to improve productivity and streamline business processes has become a priority and in some cases a key to survival. The ultimate goal is to capture the billions of dollars currently being left on the table due to out-of-stocks, which not only impacts the financial statements of both retailers and manufacturers, but also undermines their ability to create and maintain customer loyalty.

A Focus on Operational Excellence

Retailers cannot afford to remain at the status quo if they expect to succeed in this highly dynamic and competitive environment. Instead, they must adopt continuous improvement methodologies such as Six Sigma that enable them to analyze performance, identify weaknesses and sources of variation, and rapidly make the necessary improvements.



Retailers Must Adopt Continuous Improvement Methodologies

Achieving operational excellence is a journey, not a destination. Retailers must continuously adapt, in a cost-effective and efficient manner, to the changing expectations and actions of customers and competitors.

With regards to inbound logistics, the blueprint for achieving operational excellence will vary by company, but as highlighted in the table below, there are certain high-level attributes that every retailer must possess.

Attribute	Details
Timely, accurate, and complete visibility to orders, shipments, and inventory	<p>Visibility has to extend across multiple parties and nodes from product source to consumer, including vendors, carriers, customs, consolidators, freight forwarders, distribution centers, cross-docks, and stores.</p> <p>Tools and process that facilitate visibility include:</p> <ul style="list-style-type: none"> • “Scan and Pack” whereby goods are scanned by vendor as they’re being packed; • The use of Advance Ship Notices (ASN); • The use of Web portals to confirm receipt and status of purchase orders, as well as to tender, book, and track shipments.
Global Trade Management (GTM) capabilities	<p>To facilitate the movement of goods across borders, companies must have the ability to:</p> <ul style="list-style-type: none"> • Perform restricted party screenings; • Assign Harmonized Tariff Schedule (HTS) codes to products; • Complete and file trade documents such as Shippers Export Declaration (SED) and Entry Manifest. • Comply with trade regulations, including license determination and quotas; • Understand impact of duties, taxes, and other cost factors to determine landed costs; understand and leverage trade agreements such as NAFTA.
Design, plan/optimize, and execute multiple distribution strategies	<p>This generally involves leveraging different modes of transportation (ocean, air, truck, rail, parcel) and services (e.g. consolidation, cross-docking, zone skipping, direct-to-store delivery) in order to get the right product, to the right location, at the right time in the most efficient and cost-effective manner.</p>
Leverage transportation volume to achieve cost-effective rates	<p>Analyze transportation spend across entire company and network, both inbound and outbound. Look for opportunities to consolidate volume and spend with a select number of carriers. This typically includes converting inbound shipments from pre-paid to collect.</p>
Collaborative relationships with vendors, customers, logistics partners, and other external parties	<p>Partners must share a similar commitment towards continuous improvement.</p>

Attributes for Achieving Operational Excellence in Inbound Logistics

The benefits that retailers achieve by transforming their inbound operations are derived from four key areas:

- **More cost-effective transportation rates.** In many cases, the retailer has greater buying power (in terms of shipping volume) than the vendors, especially if outbound shipments are also taken into consideration. Hence, carriers are able to provide more cost-effective rates in exchange for greater volume commitments.
- **Reduction in overhead costs.** Less resources are required (or they can be assigned to more value-added activities) if you automate many of the processes currently performed via telephone or fax, including order status confirmation, shipment tendering and booking, and appointment scheduling. The latter also enables better planning and scheduling at the receiving warehouse and store, which minimizes the number of resources required to process deliveries and maximizes the amount of time employees spend on the selling floor.
- **Reduction in inventory.** Poor visibility to the status of orders and shipments creates uncertainty, which companies typically offset by carrying excess inventory. Knowing exactly when an order will ship, the actual quantity shipped, and when it will arrive enables companies to plan and respond to changes more effectively.
- **Fewer line-haul and LTL shipments.** By leveraging optimization technology, line-haul and LTL shipments can be converted into full truckload or continuous moves. Savings per shipment can range between 5 and 35 percent.

The Role of Logistics Partners

Considering the distributed nature of retail supply chains, retailers are no longer masters of their own destiny; they're ultimately dependent on their external partners for success.

For example, most retailers rely on transportation providers to move products from source to final destination, at least for segments of the journey. Therefore, it's important for retailers to align themselves with reliable carriers—i.e. carriers that pick up and deliver on-time, prevent damage and

theft, and have the necessary capacity and coverage to meet demand. But achieving operational excellence goes beyond the physical movement of goods; it requires a more holistic perspective, one focused on logistics management.

Retailers must align themselves with logistics partners, companies that go beyond just managing the physical movement of goods, but also provide the systems and services that enable flexible and efficient fulfillment processes.

Logistics is defined as “that part of Supply Chain Management that **plans, implements, and controls** the efficient, effective forward and reverse flow and storage of **goods, services, and related information** between the point of origin and point of consumption in order to meet customers’ requirements.”⁷

The key words in this definition are plan, implement, and control, which correlate with the Six Sigma DMAIC process (Define, Measure, Analyze, Improve, and Control). The definition also highlights that services and the flow of information are also integral components.

Briefly stated, retailers must align themselves with reliable *logistics partners*, companies that go beyond just managing the physical movement of goods, but also provide the systems and services that enable flexible and efficient fulfillment processes.



Service	Description
FedEx Air-Ground Distribution (AGD) & Ocean-Ground Distribution (OGD)	Services that enable customers to ship cargo to multiple destinations in North America from Asia and Europe through one single carrier. Importers can complete an Asia-to-US stores cycle time within 3-5 days through AGD or 18-21 days through OGD, eliminating weeks from traditional multi-step process.
FedEx Global Trade Manager Tools	Online resource that enables companies to access global trade documentation, perform screenings, calculate landed costs, determine license requirements, and conduct other global trade management activities.
FedEx Inbound Collect Service	Allows companies to be invoiced directly for shipments sent by their vendors, thus enabling companies to leverage their shipping volume to gain greater discounts and have better visibility and control to inbound shipments.
FedEx InSight	A free web-based tool that tracks inbound, outbound, or third-party shipments by address or account number; includes alerting and reporting capabilities.

Sampling of FedEx Services for Retailers

⁷ Council of Logistics Management

Not surprising, transportation-focused companies like FedEx are responding by creating services and technologies tailored to address the unique requirements of retailers. For example, services like Air-Ground Distribution (AGD) and Ocean-Ground Distribution (OGD) are allowing retailers to reduce cycle times by eliminating nodes in the inbound process, facilitating customs clearance, and streamlining the flow of information.

Selecting the right partner is absolutely critical. There are many factors that must be considered, such as alignment of business strategies and corporate cultures, and every company will weigh these factors differently. But according to research conducted recently by ARC, logistics executives are increasingly looking for financially stable partners that have domain expertise and can provide a range of integrated services on a global basis.⁸ In other words, they want partners that can grow with their company.

Case Studies

As part of this research, ARC interviewed three companies in the retail industry: Timberland Corporation, Levenson, and Divers Direct. Although these companies operate different types of businesses, they share a common trait: the recognition that their ongoing success depends on their ability to continuously improve their inbound logistics processes.

⁸ “Best Practices in Managing Outsourced Logistics Operations,” Adrian Gonzalez, ARC Advisory Group, February 2004.

Timberland Corporation

Timberland Corporation has a strong focus on streamlining its inbound operations and the company exhibits many of the key attributes necessary for achieving operational excellence, including good visibility to inbound processes and multiple distribution strategies.



Profile

- ◆ **\$1.4 billion designer and marketer of footwear and apparel.**
- ◆ **Operates specialty and outlet stores in the US, Europe and Asia; ships products to other retailers too.**
- ◆ **90 percent of footwear products sourced from Asia, mostly China; imports close to 3,000 containers per year into US and 1,400 containers into Europe.**

Inbound Highlights

- ◆ **Implemented “scan & pack” process to improve inbound visibility.**
- ◆ **Piloting FedEx Air-Ground Distribution (AGD) Service to ship samples and high-demand items directly to stores.**
- ◆ **Expects to reduce cycle time by 1 week by implementing FedEx Ocean Ground Distribution (OGD) Service in the future.**
- ◆ **Plans more container-level direct shipments to wholesaler DCs.**

Inbound Visibility Remains a Priority

Considering its global sourcing strategy, improving inbound visibility remains a priority for Timberland. Until recently, the company had good visibility to shipments once they arrived at the port of origin but it lacked visibility to upstream processes.

Therefore, the company implemented a “scan and pack” process, whereby items are scanned as they’re packed at the factory and the information is provided to Timberland in near real-time via a portal. Shipment-related information such as container numbers and packing lists is also sent electronically to FedEx, thus streamlining the execution processes which was historically paper-driven.

Timberland is now alerted much sooner to any discrepancies between how much product was ordered versus how much is actually being shipped, thus enabling the company to take proactive action. The next phase is to extend visibility further back into the manufacturing process so that manu-


facturing decisions and priorities can be adjusted based on demand patterns.

Leveraging Different Inbound Distribution Strategies

Timberland is also leveraging different inbound strategies to reduce cycle times and cost. The company is currently piloting Air-Ground Distribution (AGD) services from FedEx to deliver samples, promotional items, and high-demand products directly to stores in a more cost-effective and timely manner. The next phase is to investigate how it can leverage a similar strategy for its core base of products which are shipped via ocean. Timberland estimates that it can eliminate at least one week of cycle time by bypassing their distribution centers and shipping directly to stores.

Levenger

Levenger is a great example of how small and midsize retailers face similar challenges and opportunities as the big players. Therefore, the attributes for achieving operational excellence also apply to companies like Levenger.



Profile

- ◆ **A multi-channel marketer of products targeted to "serious readers."**
- ◆ **Mails about 26 million catalogs annually and averages 225,000 visits per day to its Website.**
- ◆ **Operates one distribution center and two stores.**

Inbound Highlights

- ◆ **Uses FedEx Insight to track over 600,000 shipments annually, including inbound and international.**
- ◆ **Leverages outbound transportation volume to obtain cost-effective rates on inbound.**
- ◆ **Two years ago, majority of products were sourced domestically; today, company imports about 70% of its products from Asia (about 400 containers per year).**

Centralized Visibility to Shipments

Levenger uses FedEx Insight to track virtually all of its inbound and outbound shipments, both domestic and international. This centralized view, coupled with exception management capabilities, allows the company to respond quickly to customer inquiries and delays.

Leveraging Transportation Volume

Levenger ships over 500,000 parcels via FedEx annually. By leveraging this outbound volume and existing relationship, the company has been able to negotiate cost-effective rates for its inbound shipments.

Access to Global Trade Management Expertise

In less than two years, Levenger went from sourcing most of its products domestically to sourcing about 70 percent of its products from Asia. As highlighted earlier, moving goods across borders adds layers of complexity and requirements, such as determining Harmonized Tariff System (HTS) codes for products. The key to success for Levenger was finding a knowledgeable and supportive partner that could help it comply with trade regulations and facilitate the clearance of goods through customs.

Divers Direct

As the saying goes, you can't manage what you don't control, hence the reason why Divers Direct decided to change the way it worked with its vendors.



Profile

- ◆ A multi-channel retailer of dive equipment & snorkeling gear.
- ◆ Operates seven store locations and an e-commerce site.
- ◆ Sources about 25,000 stock-keeping-units (SKUs) from over 120 vendors.

Inbound Highlights

- ◆ Migrating vendors to single carrier (FedEx), resulting in better inbound visibility and lower costs; gross margin improved by 0.7%.
- ◆ Tracking of inbound shipments via FedEx Insight enables more efficient receiving process at distribution center.
- ◆ Automatically allocating bills based on rules set up within FedEx Insight.

Migrating Vendors to Single Carrier

Scheduling inbound shipments was a challenge for the company. Since each vendor was using a different carrier, the company didn't have a holistic view of its shipments. Therefore, Divers Direct migrated its vendors

towards a single carrier. The company chose FedEx due to its existing relationship and success on the outbound side. By aggregating its volume, the company has been able to reduce its freight costs and improve its gross margin by 0.7 percent.

Streamlining the Receiving Process

Divers Direct is using FedEx InSight to track its inbound shipments, thus facilitating the receiving process at its distribution center by having forward-visibility to resource requirements.

Simplifying the Invoicing Process

Using FedEx DirectLink, Divers Direct is able to automatically allocate freight invoices to the correct general ledger account, thus saving significant time and resources formerly required to review and approve each invoice.

Key Take-Aways

- Growing profitably while outperforming the competition and enhancing customer loyalty is the burning platform that most retailers face today.

The supply chain today really starts and ends at the store shelf.

It's about having timely, accurate, and complete visibility to shelf-level information, so that when a product is consumed it can be replenished as quickly and efficiently as possible.

- Considering the downward pressure on prices, the most significant way that retailers can improve their margins is by improving their productivity and reducing costs.
- Achieving operational excellence is a journey, not a destination. Retailers must continuously adapt, in a cost effective and efficient manner, to the changing expectations and actions of customers and competitors.
- The retail inbound logistics process is becoming more global, dynamic, and complex. The blueprint for achieving operational excellence in inbound logistics will vary by company, but there are certain high-level attributes that every retailer must possess, including having visibility to orders, shipments, and inventory across the entire inbound landscape from product source to consumer.
- Retailers are no longer masters of their own destiny; they're ultimately dependent on their logistics partners for success. Therefore, selecting the right partner is critical. Logistics executives are looking for financially stable partners that have domain expertise and can provide a range of integrated services on a global basis.

Analyst: Adrian Gonzalez

Acronym Reference: For a complete list of industry acronyms, refer to our web page at www.arcweb.com/Community/terms/terms.htm

AGD Air-Ground Distribution	FMI Ford Marketing Institute
AMR Advance Manifest Rule	GMA Grocery Manufacturers Assoc.
ASN Advance Ship Notice	HOS Hours of Service
CAGR Compound Annual Growth Rate	HTS Harmonized Tariff System
CTPAT Customs-Trade Partnership Against Terrorism	OGD Ocean-Ground Distribution
DC Distribution Center	OOS Out-of-Stocks
DSD Direct-to-Store Delivery	RFID Radio Frequency Identification
FEU Forty Foot Equivalent Unit	3PL Third Party Logistics
	WTO World Trade Organization

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ARC's Logistics Executive Council (LEC) is a member-driven service that serves as a medium for collaboration, benchmarking, and best practice research for logistics and supply chain executives from manufacturing, retail, and 3PL companies.

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