Using Best Practices and Innovation to Drive Your Automotive Aftermarket Supply Chain

Purolator

We deliver Canada

Introduction

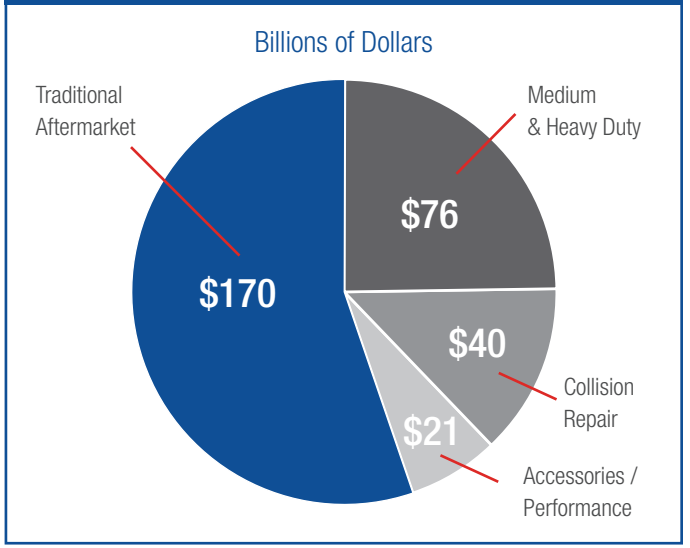
When German-based car manufacturer BMW saw a 2013 disruption in the flow of replacement parts to 40 aftermarket distribution centers and hundreds of repair shops, it experienced firsthand something that no luxury automaker ever wants to see: unhappy customers, and lots of them. The BMW disruption, which lasted for a period of several months, was caused by a glitch in its technology system, which caused delays in parts deliveries. One distributor estimated that 20 percent of BMW's customers were left waiting for essential repair work. The car company was forced to offer customers "loaner" vehicles and incur costly airfreight charges as a way to rush replacement parts to market.

While BMW is certainly not the first manufacturer to experience an aftermarket supply chain disruption, its experience illustrates three key points: (1) automotive aftermarket supply chains can be quite complicated; (2) aftermarket customers have high expectations for inventory availability and delivery schedules; and (3) technology is reshaping today's automotive aftermarket supply chains.

Before discussing the nuts and bolts of supply chain strategy and management, it's useful to understand what exactly we mean by the "automotive aftermarket." According to the AutoCare Association, the trade group that represents the aftermarket, "aftermarket" refers to all products and services purchased for light-, medium-, and heavy-duty vehicles after the original sale. This includes replacement parts, accessories, lubricants, appearance products, tires, and collision repair parts (along with the tools and equipment necessary to make those repairs).

The automotive aftermarket is a significant component of the U.S. economy, generating more than $307 billion in revenue during 2012 and directly and indirectly employing more than 6 million people. In 2012, sales represented a 3.5 percent increase over the previous year. Within the industry, sales are broken down based on sales of parts for light, medium, and heavy vehicles.

AUTOMOTIVE AFTERMARKET BREAKDOWN—2012



Source: Aftermarket Digital Factbook 2014, Volume 82.

VALUE OF U.S. LIGHT VEHICLE AUTOMOTIVE AFTERMARKET		
YEAR	TOTAL SALES (Millions)	PERCENT CHANGE (Over Previous Year)
2009	$189,788	1.3
2010	$190,176	0.2
2011	$196,018	3.1
2012	$202,384	3.2
2013	$318.2	3.4

Source: International Trade Administration

Technology and innovative thinking are having a profound impact on aftermarket supply chains. The purpose of this white paper is to discuss challenges within the automotive aftermarket along with solutions that can help improve overall supply chain management.

Industry Overview/ Key Challenges

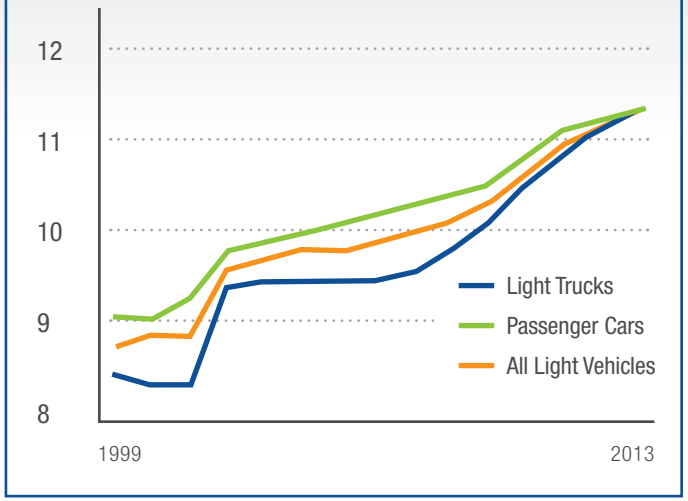
Automotive parts are generally defined as either original equipment (OE) or aftermarket parts. OE parts account for 70 percent of all U.S. automotive parts production. They are used in the assembly of new motor vehicles or purchased by a manufacturer for its service network. Suppliers of OE parts are broken into three different "tiers":

- Tier One: Supply equipment directly to vehicle manufacturers
- Tier Two: Produce components for Tier One suppliers
- Tier Three: Manufacturers that supply raw materials used in the production of components

Aftermarket parts are divided into two categories: replacement parts and accessories. Replacement parts are automotive parts built or remanufactured to replace OE parts as they become worn or damaged. Accessories are made for comfort, convenience, safety, or appearance.

The automotive aftermarket industry has experienced several significant changes in recent years. Economic volatility has resulted in consumers hanging on to their vehicles for longer periods, driving up demand for aftermarket products. The average age of a passenger car or light vehicle on the road during 2013 was 11.4 years, compared with an average 9.7 years during 2003.

AVERAGE AGE OF VEHICLE ON ROAD TODAY IS 11.4 YEARS



Source: Aftermarket Digital Factbook 2014, Volume 82.

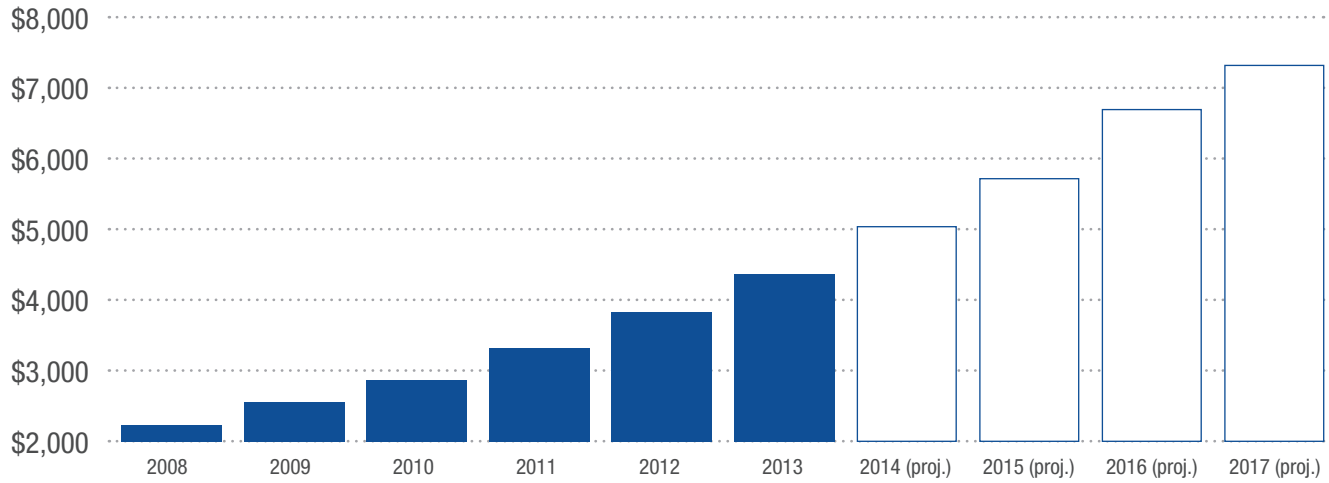
What had been a corresponding spike in "do-it-yourself" repairs has been shifting back to a "do-it-for-me" mode. At the same time, product improvements made by OEMs have made parts more durable, which reduces demand for replacement parts. These changes are occurring at a time when a series of mergers and consolidations have changed the industry's competitive landscape.

These are some of the factors affecting the supply chain as companies adjust to the changing landscape while simultaneously trying to maximize profit and efficiency. Other factors with which aftermarket supply chain managers must contend include the following:

- **Demand for Shorter Lead Times with High Expectations for Precision.** A unique characteristic of the automotive aftermarket is its standard "within 24 hours" delivery guarantee. Suppliers that fail to meet this expectation risk losing customers to competitors and sustained damage to their reputations. As a result, a supplier must deliver the part—even at a loss—or face significant repercussions.
- **Increased Spotlight on Quality.** Recent high-profile product recalls, including General Motor's 2014 recall of vehicles with a faulty ignition switch and Nissan's vehicle recall resulting from a potential airbag defect, have resulted in demands for heightened quality controls throughout the entire automotive supply chain. This has increased scrutiny on aftermarket product quality.
- **Part Complexity.** Increasing use of technology and electronics requires development of corresponding aftermarket parts and services. This is forcing a degree of "aftermarket reinvention." The growth of hybrid and electric vehicles, which includes unique parts and maintenance systems, requires providers to expand product inventory and adapt to changing demands. Paul McCarthy, vice president of industry analysis, planning and member services for the Automotive Aftermarket Service Association (AASA), noted that half of warranty items today are software related rather than parts being replaced. "So we have a brave new world, and it's absolutely a new dialogue between service providers and customers."
- **Low-Cost Country Sourcing.** The U.S. aftermarket industry has been affected by a growing number of imports, including many counterfeit products from low-cost countries. A 2011 report by the International Trade Administration noted that counterfeiting cost auto suppliers $45 billion worldwide. Leading the list of "most frequently counterfeited" products were brake pads and filters, which are high-demand parts.
- **Global Nature of Supply Chain.** Aftermarket businesses must contend with complex supply chains that often include Asian manufacturers. In recent years however, Mexico has become an increasingly attractive source for parts production. In fact, by one estimate, Mexico's automotive logistics base could grow 400 percent by the end of the decade. While it may seem that sourcing parts from Mexico would be a logistics winner, suppliers will need to overcome U.S. restrictions on Mexican trucks traveling on U.S. highways.
- **Aftermarket SKUs are Estimated to be in the Millions.** According to MOTOR Information Systems, there are 80,000 unique OEM part numbers introduced each year. During 2010, 24 percent of those were new parts. Understanding how to manage an inventory that large, and being able to ensure the right product—no matter how obscure it may be—reaches a customer at the right time, is vital to tsuccess.

- **Internet is an Increasingly Attractive Option.** Just as online shopping has impacted so many aspects of traditional retail, so too has it affected sales of aftermarket parts. Research by MacKay & Company, an Illinois-based consulting firm, found that e-Commerce has made significant inroads in the purchase of aftermarket parts. MacKay surveyed more than 700 fleet managers and found 32 percent use the Internet as their primary method of ordering parts, and 18 percent said they use the phone. Compare this with results from five years ago, which found phone orders were preferred by 31 percent of respondents, with online sales second at 26 percent. The MacKay analysis forecasts online sales will surge to 43 percent over the next five years.
- Increased regulation, particularly with regard to fuel performance standards and EPA emissions mandates, will force aftermarket manufacturers to keep pace with changing product standards.
- The aftermarket industry has seen a growing trend of consolidations and acquisitions among key players—the acquisition of CARQUEST by Advance Auto Parts, for example. This has had the effect of reducing the number of distributors in the market, thereby intensifying pressure on manufacturers to make concessions as a way to gain cherished shelf space for their products.

ONLINE SALES OF AUTO PARTS & ACCESSORIES, EXCLUDING ONLINE AUCTIONS ($Millions)



Source: 2014 Hedges Company

With these challenges comes the inherent need for an aftermarket manufacturer to perform its core mission: delivering quality replacement parts and accessories to customers—distributors, retail stores, or consumers–at an acceptable price point and within an expected delivery time, with little-to-no margin for error.

Critical to any aftermarket business's success is a well-managed and carefully constructed supply chain. Fortunately, today's supply chains are able to avail themselves of innovative concepts and technological solutions that were impossible to imagine as recently as a decade ago.

Automotive Aftermarket Supply Chain Considerations/ Solutions

With so much technology and web-based analysis available, it can be difficult for an aftermarket business, or any business for that matter, to wade through the sea of information to find the perfect solution. Even worse is when a business makes a decision about a key supply chain process, then the "best thinking" changes or a recently installed technology system is upgraded.

Staying abreast of industry best practices and innovations requires a strong commitment of time and resources, which for most businesses is a luxury they do not have. Instead, businesses tend to enlist third-party logistics providers with broad experience and necessary assets to manage their complicated supply chains. But, in order to ensure a collaborative relationship, it is essential for an aftermarket business manager to understand the changing face of logistics, especially the many innovations taking shape on a regular basis.

Choosing the Right Logistics Partner

Aftermarket manufacturers live and die based on their ability to meet delivery demands. Expectations for overnight—if not same-day—delivery have become the industry norm. And a vehicle stuck in a repair shop waiting for a part means not only an unhappy customer but an unhappy repair shop or distributor who might choose a different—more reliable—supplier the next time.

Key to this is partnering with a third partner with the experience and assets to manage a multifaceted, time-sensitive supply chain. Warehousing, for example, is a critical part of aftermarket distribution. A few other considerations:

- **Service Customization.** An ideal logistics partner will offer an individualized plan based on a customer's specific needs, rather than a "one size fits all" approach. Aftermarket businesses are increasingly rejecting logistics partners that don't seem to "get" the need for flexibility and creativity. A good provider will be invested in your success and will find a way to have a product delivered—regardless of the obstacles that have to be overcome!
- **Innovative Solutions.** And on the subject of creativity, it is essential to select a provider that offers forward-thinking, technology-based options and can back them up with results! If a logistics provider can't offer a distribution network that avoids an unnecessary, costly stopover at a distribution center located hundreds of miles off-route, then it's probably best not to entrust your time-sensitive deliveries to that provider. Instead, look for an alternative that offers technology-based route optimization solutions or suggestions for consolidating shipments for greater efficiencies.
- **Customer Service.** As with all time-driven industries, the automotive aftermarket is highly susceptible to last-minute glitches, ranging from weather factors to unforeseen infrastructure issues to delivery changes. Quality customer service to manage the unexpected has become

a high expectation for aftermarket manufacturers. And customer service means it is no longer acceptable to be provided with an 800 number to call should something go awry. Instead, quality logistics providers are assigning teams of customer service professionals to work directly with businesses. Often a customer agent will know about a problem—and have it solved—before the aftermarket client ever knows about it. Finding a logistics provider with a strong commitment to quality customer service has become essential to most aftermarket businesses.

- **Reach of Service.** A final consideration is to choose a logistics provider that can reach your customers. Sounds easy right? However, many logistics providers overpromise on the depth of their distribution networks. If your business has customers in Canada, for example, make sure your logistics partner has the experience necessary to (a) clear goods through the complicated U.S./Canada border clearance process; (b) accommodate Canada's various labeling, marketing, and bilingual (French and English) requirements; and (c) ensure delivery throughout that vast country.

Managing a Large Inventory of Aftermarket Parts

As consumers increasingly delay replacing their vehicles—the average light vehicle now exceeds 11 years in age—anticipating replacement part demand becomes increasingly complicated. By some estimates, the number of aftermarket SKUs exceeds two million. But when a customer needs a gas tank cap for a 10-year-old sedan or a 2-year-old SUV, how can an aftermarket supplier be sure to have the precise part in stock at the exact time it's needed?

As cars get older, finding the right part becomes more difficult. And as new cars have become more technology-reliant, the nature of replacement parts has changed. Parts suppliers must strike the right balance so they don't disappoint and lose customers to competitors while being careful not to carry too much inventory.

So the challenge is to build a high level of integration between warehouses, distribution centers, and order management processes. Following is a brief overview of current trends that are helping businesses to better manage inventory needs:

Vendor-Managed Inventory (VMI)

Although not a new concept, VMI has grown in popularity in recent years largely because it helps businesses avoid having to assume responsibility for inventory. Instead, inventory obligations shift to the supplier who tracks inventory levels and restocks as needed. Inventory is held by the supplier on-site or at

a nearby location. Key benefits to the business include access to inventory as needed and liability to pay only for what is needed. At the same time, suppliers benefit from ensuring that merchandise is properly displayed and that employees are trained about products' selling points.

VMI is a technology-driven partnership with strong reliance on electronic data interchange (EDI). Key information about product sales is transmitted on a predetermined basis from the customer to the vendor. That information could include quantity sold (both in dollar value and in number of units), quantity on hand, and quantity on order. Based on this data, an electronic order is generated and approved by both the seller and supplier.

ADDITIONAL VMI BENEFITS

- Greater flexibility with capital—by investing in less inventory, a business will have additional funds to spend on other areas
- Improved fill rates, decreased stock-outs
- Reduced administrative burden
- Reduced purchasing costs—since orders are generated via EDI data, retailers no longer need to generate time-consuming purchase orders
- Less on-site storage space demands

TOP PRESSURES FORCING COMPANIES TO FOCUS ON DEMAND MANAGEMENT

Source: Demand Management in Discrete Industries, Aberdeen Group, 2007

Demand Management

In its simplest form, demand management refers to the process whereby businesses utilize various indicators to forecast customer demand and align their supply chain to meet those projections. It has also been defined as "balancing customers' requirements with the capabilities of the supply chain," while still others have likened demand management to "management by crystal ball."

Regardless of how it is defined, demand management is a highly effective technology-driven tool for helping businesses manage aftermarket inventory.

Central to its success is the synchronization and integration of many different functions, with technology being the glue that holds everything together. The typical business has access to troves of data about virtually all aspects of its business. Big data can be truly overwhelming unless a business has the mechanisms in place to properly manage and assess the information. Demand management provides the road map for effective data analysis, which enables better and more strategic decision making.

Demand Sensing

Demand sensing is a relatively new concept in inventory management that allows businesses to focus on near-term demand. Demand sensing takes the data-driven principles of demand management to a higher level by applying additional indicators and different mathematical equations. Whereas demand management tends to rely on historical sales data, and makes assumptions based on previous years' practices, demand sensing relies on real-time supply chain practices and tries to predict future demand based on indicators including open orders and daily sales.

As reported by SupplyChainBrain, demand sensing gives businesses a more exact forecast of consumer demand. "The method serves as an alternative to traditional demand planning, whereby companies look primarily at seasonal patterns and average sales for a given time of year," explained Rob Byrne, chief executive officer of software provider Terra Technology. "Demand sensing," says Byrne, "brings in all the data that might be relevant about what's going on in the marketplace." Orders, historical trends, point-of-sale data, and channel inventory are among the inputs that can be factored into the mix.

Just-in-Time

Initially popularized by Japanese automakers more than 20 years ago, the just-in-time approach to manufacturing and inventory management has made a strong comeback in recent years as recession-weary businesses seek to maintain lean inventories and keep costs sharply under control. Through the just-in-time approach to inventory, a business stocks only what it needs to fill immediate demand, often relying on a single supplier for key parts. Timely replenishment and reorders depend on orderly movement of all parts of the supply chain—one delayed shipment at any point can result in complete disruption of the entire process.

Third-party logistics providers have proven to be an essential component of just-in-time management. As reported in Inbound Logistics, a logistics provider offers "extensive transportation resources, scheduling and management capabilities, and logistics expertise" that can ensure smooth coordination between just-in-time scheduling and deliveries.

Smart businesses realize the key to successful inventory management lies in the troves of data that are readily accessible. Figuring out how to unlock that data, and properly interpret the clues it holds, is integral to accurate inventory management. As the above

discussion indicates, there are many schools of thought regarding the "best" way to approach data, but in the end, a business will need to decide what method best meets its unique circumstances.

Warehouse and Distribution Center Solutions

With so much inventory to oversee, warehouse and distribution center management becomes a critical part of the aftermarket supply chain. Larger manufacturers must decide whether to outsource their warehousing or keep it in-house, while outsourcing is generally the only viable option for smaller companies.

Frost & Sullivan aftermarket analysts argue that, where feasible, the entire warehousing operation is best left to a third party. "A 3PL has the existing infrastructure and is able to coordinate shipments from point of origin to final destination. Most importantly they are able to provide warehousing services at a much cheaper rate. Multiple clients and multiple sources of revenue under one warehouse gives this facility several revenue sources," analysts wrote in a 2011 overview.

To this point, a logistics provider will be able to provide a comprehensive menu of warehousing solutions to facilitate processing of aftermarket products. Among these services:

- Cross Docking
- Picking and Packing
- Repacking and Labeling
- Reverse Logistics

But in terms of an overall warehouse strategy, there are other options for an aftermarket business looking to maximize efficiency and reduce costs.

Technology is King

There's no denying the impact technology has had in improving processes, providing visibility, and reducing costs throughout the supply chain. But with a seemingly endless supply of technology solutions—and technology providers—to choose from, it can be daunting for an aftermarket business to determine the best course.

IndustryWeek recently highlighted the experiences of aftermarket retailer Discount Auto Parts in finding its technology solution. According to the report, the company knew its end objective was finding supply chain efficiencies, and to get there, it developed a list of prioritized improvement initiatives. Those initiatives included implementing an advanced planning and scheduling solution, distribution network optimization, and SKU rationalization. According to IW, "these initiatives enabled Discount Auto Parts to improve forecasting and planning accuracy and reduce inventories at all levels within its supply chain." The net result of Discount Auto Parts technology makeover—$56.5 million in reduced working capital and $106 million in cost reductions over four years.

Horizontal Collaboration

Horizontal collaboration can be best defined as "manufacturers sharing supply chain assets for mutual benefits." Businesses in the same industry, that often have the same customers and same logistics needs, are prime candidates for horizontal collaboration. A current "high-profile" example involves two competitive chocolate manufacturers, the Hershey Co. and The Ferrero Group in North America. The two companies announced in 2011 that they had entered into an alliance to share warehousing, transportation, and distribution processes and assets.

Other "competitors" sharing logistics processes include Nestle USA and Ocean Spray, as well as Pennsylvania-based "Just Born" confectioner (best known for "Peeps" marshmallow candies) and an alliance of five other candy companies. In an interview with American Shipper magazine, Joel Sutherland, managing director at the University of San Diego's Supply Chain Management Institute, explained, "Just Born increased the amount of freight shipped out of its distribution center by including other confectionery shippers to form a collaboration of 'like' shippers delivering product to 'like' customers." The impact? Sutherland says that the collaboration will save the companies "about 25 percent of their total transportation costs per year."

So far, the concept has been slow to catch on in the aftermarket industry. But one industry professional told Inbound Logistics that auto suppliers might be coming around to the idea. Consider a supplier that needs to deliver to 3,000 NAPA Auto Parts stores and 2,000 O'Reilly stores. "Another company across town is probably delivering to many of the same places, or to many of the places where distribution centers for those retailers are located," said Kevin Hogan of Ernst & Young.

Distribution Center Bypass (DC Bypass)

Until recently a two- to three-day stopover was "baked in" to a standard distribution plan, regardless of whether or not it was needed. According to Supply Chain Digest, in some cases, a shipment was required to travel thousands of miles out of the way to make a distribution center stopover only to make a return trip back to the vicinity of its starting point.

In recent years, businesses and logistics providers have realized the enormous waste in this arrangement. Instead, companies have opted to open regional distribution centers to accommodate local needs or have streamlined routes so that shipments can travel directly to their end destination.

DC bypass can eliminate 7-14 days from the supply chain, which represents a significant amount of inventory that can be taken out of the system. The shortened distribution cycle is a lifeline for businesses trying to rush products to market and for those simply trying to control costs and better manage transportation spend. Many retailers are discovering that DC bypass enables a reduction in inventory levels. This is because inventory that is constantly moving, rather than sitting

idle in a warehouse, provides retailers a "real time" sense of supply versus demand. Some logistics experts have even predicted that DC bypass will eventually mean the end of inventories—the supply chain will become synchronized to the point that retailers will be able to stock exactly enough products to meet their needs.

Transportation Optimization

Headlines were made throughout the transportation and logistics industry in July 2013 when engineers at Oregon State University announced a potential breakthrough in the way truck transportation is organized and routed. The accompanying study, "Mixed fleet dispatching in truckload network design," details a new mathematical equation, which concludes that the nation's trucking system would be better served by a new system that is a hybrid of existing models. The new system would combine "point to point" in which a driver stays with a load for an entire route, with "hub and spoke," where less-than-full loads are changed at designated points with "relay" networks through which drivers are switched in and out.

According to the new research, routing systems would be determined by a computer program and could potentially save millions of dollars, improve working conditions for drivers, and dramatically change the way in which the nation's freight transportation is managed.

Whether or not the new approach comes to fruition remains to be seen, but the work is a good example of the type of innovation that has taken hold throughout the logistics industry. Computer modeling, insightful thinking, and a desire for sustainability have helped streamline routes, eliminate waste, and achieve maximum efficiency. Following are a few additional examples of transportation breakthroughs:

Consolidation

Consolidation is a highly efficient way to control transportation costs—and costs associated with any international border clearances. By consolidating smaller shipments into one larger unit, more favorable rate terms may apply. Essentially, more expensive less-than-truckload shipments are converted to full truckloads, and in the process, a company can reduce costs and provide better service to end customers.

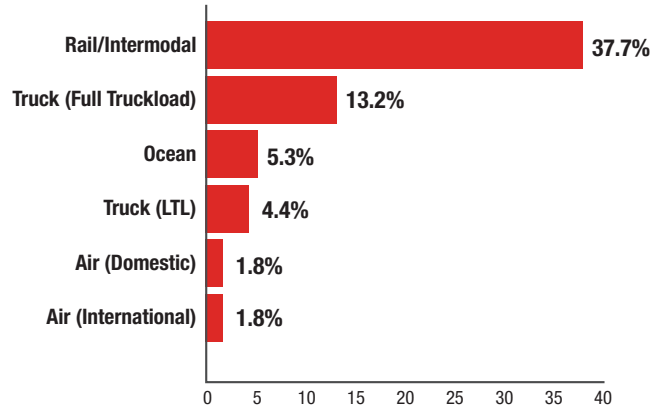
With regard to border clearance, a consolidated shipment can cross the border as a single unit, thereby reducing clearance wait times and associated fees. Once across the border, a consolidated shipment is then broken down, sorted, and directed to the appropriate distribution channel.

Intermodal Options

As the U.S. trucking industry continues to address the dual problems of tightened capacity and a severe driver shortage, a growing number of shippers are turning to rail and other intermodal options for long-distance shipments.

A 2013 survey of transportation managers found more than 66 percent of respondents have switched freight to different modes, with almost 38 percent saying they had switched to rail/intermodal.

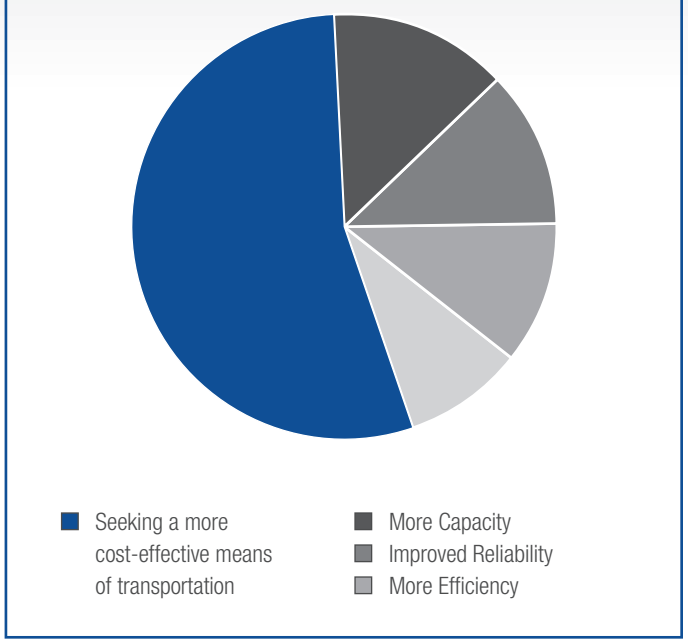
WHICH MODE HAVE SHIPPERS SHIFTED TO?



Source: Freight Transportation 2013: State of Industry Report, National Shippers Strategic Transportation Council, 2013.

When asked for the reasons behind the switch, the most common responses were cost efficiency (41.2 percent), more capacity (10.5 percent), improved reliability (8.8 percent), greater efficiency (8.8 percent), and shifts in transit-time requirements (6.1 percent).

REASONS FOR MODE SHIFTS



Source: Freight Transportation 2013: State of Industry Report, National Shippers Strategic Transportation Council, 2013.

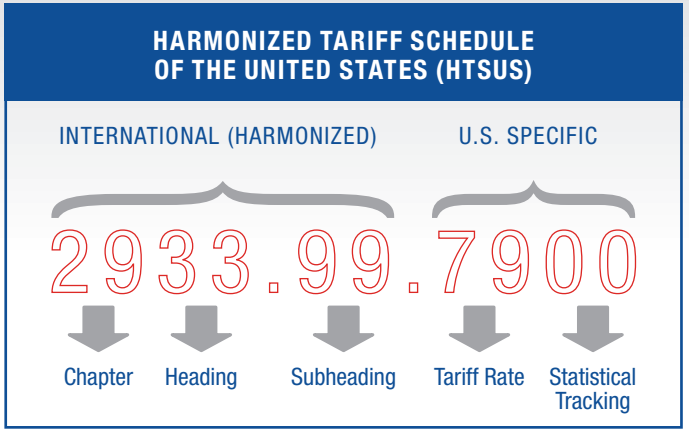
Rail transport—the primary venue for intermodal shipping—has undergone a transformation over the past 20 years. Whereas rail has historically been associated with long, slow journeys of cars filled with coal, grain, or oil, today's railways are modicums of efficiency. Among the transformations that have taken place:

- The industry has become more streamlined to the extent that strategically located hubs support point-to-point cycles.
- Rail has made significant improvements in speed and consistency, making them more truck-like. According to one rail provider, a rule of thumb is "truck plus a day."
- Rail can transport a ton of freight more than 480 miles on a single gallon of diesel.

Regulatory/Border Compliance Issues

Aftermarket businesses that ship to Canada must contend with the realities of the U.S./Canada border clearance process. Products must pass through a battery of U.S. and Canadian mandates that require a significant amount of paperwork; payment of all applicable duties, taxes, and fees; and compliance with all security protocols.

But as time consuming and frustrating as border compliance can be, there are ways to expedite the process and possibly even find reductions in duty payments.



Duty Relief

Several processes and programs are in place to help U.S. businesses minimize the amount of duty owed on their shipments including:

- **Duty Drawback.** This is a CBP-administered process whereby businesses that import products that are subsequently exported or destroyed may be eligible for a reimbursement of up to 99 percent of the duty paid at the time of import.
- **Tariff Reclassification.** Every product that enters the U.S. must bear a 10-digit import code selected from the Harmonized Tariff Schedule of the United States (HTS). Failure to assign the correct code could result in a product being assessed a higher rate of duty than necessary or in being denied favorable trade benefits to which they are entitled.
- **NAFTA.** The North American Free Trade Agreement eliminated duties on virtually all products originating in the U.S., Canada, and Mexico. Businesses with goods that meet NAFTA's "origination" requirements may file a NAFTA Certificate of Origin, which entitles the goods to cross borders duty free. It's important to note: NAFTA benefits must be requested—they are not automatically applied.

Trusted Trade Programs

The United States, Canada, and Mexico administer programs that grant expedited clearance to qualified participants. To qualify, a logistics or transportation provider must apply and undergo a rigorous screening process. These programs include the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT) program, Mexico's Alliance for Secure Commerce NEEC, Canada's Partners in Protection (PIP), and the joint U.S./Canada program Free and Secure Trade (FAST).

Non-Resident Importer Program
This is a program administered by the Canada Border Services Agency that allows U.S. businesses to compete "on a level playing field" in the Canadian market. U.S. businesses can act as "importer of record," charge Canadian customers a landed cost at the time of purchase, and enjoy a less onerous paperwork burden and clearance process.

Electronic Filing
Like most business transactions, the government has become increasingly computerized, with much of the regulatory process now able to be completed online. In fact, certain programs, including the Automated Export System (AES), must be complied with electronically—paper documentation was eliminated in 2008.

Logistics Partner Expertise
If your business does not have the internal capacity to hire a team of compliance experts, it's vital that you have that capability within your supply chain team—namely, your logistics partner. A qualified logistics provider will have staff in place who are continually apprised of changes in regulations that affect your industry and cannot only ensure that your shipments are in full compliance but can also take advantage of any benefits to which you may be entitled, ranging from tax treatment to favorable trade provisions.

Implementing an Effective e-Commerce Strategy

"If you're not there, you need to get there because that's what customers are looking for," John Blodgett, sales and marketing manager for MacKay & Company, said in a February 2014 interview with Trailer.BodyBuilders. MacKay released a survey of fleet owners, which found 32 percent currently purchase parts online, a number expected to surge to 43 percent by 2020. By some estimates, online sales for aftermarkets may be as high as $4 billion annually.

But great care and planning are essential before an aftermarket manufacturer or supplier decides to expand to the Internet. Some key considerations:

Inventory Management
Strategic decisions will need to be made about where to store inventory and what volume of supply should be designated to fulfill e-Commerce orders. Some businesses choose to fulfill online orders from their brick-and-mortar locations or by intermixing e-Commerce orders with regular orders. Others choose to enlist a logistics provider for e-Commerce fulfillment needs. A business will need to do the necessary research and determine the strategy that best fits its needs.

Customer Expectations
Aftermarket businesses are used to meeting customer expectations for fast, nearly immediate delivery—a high level of service made possible through a well-managed supply chain process. Will online customers expect the same level of service? Before opening an online store, a business will need to evaluate its service offerings and the cost to provide those service levels. Research shows that online shoppers expect either free or inexpensive shipping options and also expect expedited delivery windows.

Content is King
Because of the large number of parts associated with the aftermarket, and the uniqueness of each of those parts, a website must be easy to search with a high degree of flexibility. Most aftermarket sites are searchable by SKU, UPC, OEM, or aftermarket part number. Other search options may include manufacturer, model/year, or functionality.

Are You Ready to Export?
Opening your business to online sales opens you to the possibility of a global customer base. Don't forget, the worldwide web truly reaches the entire world! Before deciding to export, even if it's as seemingly simple as sales to Canada, several considerations must be weighed:

- **Pricing/Local Currency Conversions.** Will your business be able to charge your non-American customers an "all-in" price that includes all taxes, customs, and brokerage fees at the time of purchase—in their native currency?
- **Border Clearance Issues.** Transporting goods into a foreign country involves multiple customs

compliance issues ranging from regulatory mandates, tax/duty requirements, and security protocols. Plus, depending on the content of the item being shipped, a host of "other government department" requirements could be triggered. It's essential to have in place a plan for ensuring full compliance with all border clearance requirements.

- **Regulatory Issues.** Did you know Canada requires bilingual (French and English) labeling for most products shipped to that country? While efforts are being made to harmonize packaging and labeling requirements for U.S. and Canadian manufacturers, U.S. businesses must be in full compliance with all Canadian requirements before a shipment can enter that country.
- **Transportation.** Once your shipment has left the U.S., then what? Care must be taken to enlist a transportation provider with experience in Canada, including a sufficient distribution network that extends well beyond the border.

Reverse Logistics: A Key Part of the Aftermarket Supply Chain

The National Retail Federation estimates that merchandise returns during 2013 accounted for 8.6 percent of total sales, or about $270 billion. For the auto aftermarket, a high returns rate is essentially an integral part of doing business. This is because of the exacting nature of replacement parts, which allows little leeway when it comes to product specifications—a replacement windshield wiper either fits a particular vehicle make/model or it doesn't.

But while returns have traditionally been regarded as a necessary evil, today's aftermarket managers are using returns as a way to enhance customer loyalty and even to recapture revenue through sale of refurbished and undamaged merchandise. Central to an efficient returns process is a well-crafted reverse supply chain that meets a business's specific objectives.

- **Consolidation.** Establish a process that consolidates returns to a centralized location for processing. This is especially important for returns from Canadian consumers that need to cross the border. By consolidating smaller shipments, returns can clear the border as a single larger unit, thereby minimizing customs review time and helping control transportation costs.
- **e-Returns.** Customers have high expectations for their returns experience—most expect to return an item at little to no cost to them and to have their "reason for return" rectified within a short period of time. Customers also expect the process to be as simple as possible.

Through e-Returns, an electronic interface enables labels to be preprinted, which can either be included with an outbound shipment or accessed via a website or email. In some instances, a consumer simply takes the return to a designated retail center. e-Returns programs tend to be very consumer-friendly and hassle-free, although not as directly responsive as the RMA option.

- **Returns Material Authorization (RMA).** RMA is a win-win for businesses and consumers. By requiring a consumer to obtain prior authorization before returning a product, a business is able to track returns volume and detect any widespread complaints or defects about a certain product. A business is able to control exactly which products are being returned and to designate precisely where they should be sent. The consumer wins because the RMA process allows for 24/7 tracking and a high degree of visibility into the process. However, to be effective, an RMA process will need a high degree of integration between a transportation provider, customer service department, accounting department, and repair and inventory management systems.
- **Another Important Consideration is Flexibility.** Not every business will need to have returns picked up every day or maybe not even every week. And not every business's returns will follow the same logistics plan—some will be held for a predetermined period; some will be shipped to a returns processing center; some to a distribution center; and so on. But regardless of its preferences, a business will expect its carrier to offer the flexibility needed to meet its precise needs—a returns policy based on its schedule, not based on the limitations of a logistics provider.

Conclusion

When AASA's Paul McCarthy addressed the 2013 Global Automotive Aftermarket Symposium, he spoke about the aftermarket supply chain he envisions for 2020: "You'll hop into your car in the morning and your car will say to you, 'Your electronic shocks have informed us that they're approaching the end of their life. We've checked your schedule. It looks like you have an opening next Thursday. We've contacted your service provider, scheduled an appointment for you, and sent the diagnostics to them. They're ready for it and they'll have the part waiting."

As new vehicles become increasingly electronic-and-technology dependent, the automotive aftermarket will need to adapt to accommodate these new offerings while continuing to serve its traditional role as a source for replacement parts and vehicle accessories.

Fortunately, technology and creative thinking are keeping pace with advances in automotive design, and aftermarket providers are now able to upgrade their supply chains for maximum efficiency. The tools have been created. But understanding those tools and not being afraid to try new solutions will be key to future automotive aftermarket supply chain success stories.

Purolator. We deliver Canada.

Purolator is the best-kept secret among leading U.S. companies who need reliable, efficient, and cost-effective shipping to Canada. We deliver unsurpassed Canadian expertise because of our Canadian roots, U.S. reach, and exclusive focus on cross-border shipping.

Every day, Purolator delivers more than 1,000,000 packages. With the largest dedicated air fleet and ground network, including hybrid vehicles, and more guaranteed delivery points in Canada than anyone else, we are part of the fifth largest postal organization in the world.

But size alone doesn't make Purolator different. We also understand that the needs of no two customers are the same. We can design the right mix of proprietary services that will make your shipments to Canada hassle free at every point in the supply chain.

For more information:

Purolator International
1.888.511.4811
wedelivercanada@purolator.com
www.purolatorinternational.com
http://blog.purolatorinternational.com

References

"360 Degree Perspective of the North American Automotive Aftermarket," Frost & Sullivan, February 2011.

"AASA Automotive Aftermarket Status Report Shows Market Shift Away from DIY," press release, Automotive Aftermarket Suppliers Association, February 2, 2012.

"About the Aftermarket," Automotive Aftermarket Industry Association website.

Aeppel, Timothy, "For Lean Factories, No buffer," The Wall Street Journal, April 29, 2011.

Apostolides, Zoe, "BMW battles supply chain disruption in aftermarket," Automotive Logistics, August 27, 2013.

"Automotive Aftermarket Reverse Logistics Opportunities," Inmark Reverse Logistics, October 2009.

"Automotive Logistics Focus Heat Up as Automotive Aftermarket Industry Grows," Cerasis, October 31, 2013.

DeBates, Kristin, "Tips for Aftermarket Suppliers and Retailers Before Gearing Up for e-Commerce," Specialty Equipment Market Association, October 2013.

Deluca, Ashley, "The Aftermarket Consumer: Do-It-Yourself or Do-It-For-Me?", Automotive Aftermarket Industry Association, 2005.

Edwards, John, "Tuned Up: Priming Auto Logistics for Peak Performance," Inbound Logistics, February 2008.

"Frost & Sullivan: Increasing Age of Vehicles Sustains Growth in North American Brake Rotors, Drums, and Calipers Aftermarket," press release, Frost & Sullivan, March 12, 2014.

"Global Logistics News: When does 'DC Bypass' make Sense," Supply Chain Digest, September 2, 2008.

"In a Complex Retail World, Kellogg Company Turns to Demand Sensing," SupplyChainBrain, August 6, 2012.

Jensen, Christopher, "Total of G.M. Vehicle Recalls in 2014 Hits 4.8 Million," New York Times, March 29, 2014.

Kolman, David, "How is the Internet changing the aftermarket parts industry?" VehicleServicePros.com, February 7, 2014.

Kulisch, Eric, "Shippers take collaborative logistics to the next level by partnering on truck capacity," American Shipper, February 2012.

Murray, Martin, "Vendor Managed Inventory," about.com.

O'Brien, Kevin, "Value-Chain Report—Supply Chain Success in the Aftermarket," IndustryWeek, December 21, 2004.

"On the Road: U.S. Automotive Parts Industry Annual Assessment," U.S. International Trade Administration, 2011.

"Polk Finds Average Age of Light Vehicles Continues to Rise," Polk Analytics, August 6, 2013.

"Nissan Recalls Nearly 1 Million Vehicles Over Faulty Airbag," Business Insider, March 26, 2014.

Rittman, Tom, "2013 Consumer Returns in the Retail Industry," National Retail Federation, January 2014.

Sevart, Matthew, "Next decade harbors monumental changes for aftermarket service providers," Parts & People, August 1, 2013.

"Vertical Industry Brief: Automotive Aftermarket," IBS Software, 2003.

Vincent, Paul, "The crystal ball of demand management," The Source Blog, July 24, 2009.

Weber, Rick, "Fleets plan to order more parts online as part of a rapidly developing industry, and new platforms are being launched to serve the demand," Trailer-Body Builders, February 1, 2014.