Benchmarking the Perfect Order:

A Comprehensive Analysis of the Perfect Order in the Retail Industry

2005 Report

Table of Contents

Introduction

In today's competitive retail environment, the success of the retailer-supplier relationship is integral to improving margins for retailers. However, a recent study of the retail industry commissioned by the Retail Compliance Council reinforces what retailers have been saying for years – that suppliers are still not yet providing retailers with a reliable and consistent source of supply.

David Schneider, Director of Engineering and Logistics for Pep Boys, notes: "Many vendors simply do not realize how much this poor performance is hurting retailers." This study – the first of it's kind to analyze real retail shipment data of critical quantities – shows just how far suppliers need to go to perfect a perfect order to retailers.

What is a Perfect Order?

A perfect order is characterized as being on time, complete, damage free and having accurate documentation. While retailers often look for a variety of performance attributes – almost all retailers agree that these four are the most critical for suppliers to deliver on and almost all retailers have those four perfect order criteria in their routing guides.

Why the focus on the Perfect Order? Traditionally, many suppliers have focused on fill rate with regards to on time shipments as the primary measure of evaluating their fulfillment performance. This age old emphasis on fill rate still stands today as the primary metric warehouses and distribution centers use – ranking as the number one metric employed by member organizations of the Warehouse Education Research Council. However, retailers know fill rate/on time shipments offer only a snapshot of overall performance. Just because an order ships on time does not mean that the retailer receiving the shipment was satisfied. Most retailers have addressed this by creating comprehensive routing guides that outline a variety of "compliance" guidelines with regards to the orders they receive from suppliers.

Measuring the Perfect Order

What makes the perfect order concept unique is not the focus on the Top 4 Key Performance Indicators, but rather the fact that the metric highlights the total impact of an incorrect order. The approach is similar to the traditional approach manufacturers have used for years to measure First Pass Yield in a production factory where each production process is measured and total "yield" or fallout of the entire process is calculated as an index.

The perfect order index (POI) is established by multiplying each component of the perfect order to one another. For example, if a firm is experiencing a measure of 95% across all 4 metrics of the perfect order (on time, complete, damage free and accurate invoicing), the resulting perfect order index would be

81.4%. The traditional approach to looking at each KPI separately often lulls organizations into a false sense of good performance. For example, your order might have arrived on time 99% of the time – but if it was not a complete order the customer is still impacted. By focusing on a more holistic approach, a company can calculate the total effect of a supplier's logistics. An example is shown below where a supplier has achieved 95% performance in each of the key four perfect order attributes. The result – total performance falls to 81.4%

Example Perfect Order Index

On Time	X	Complete	X	Damage Free	X	Accurate Invoicing	=	POI
95%	X	95%	X	95%	X	95%	=	81.4%

If the measure had fallen to 90% for each component, the perfect order index would have dropped significantly to 65.6%.

The focus of the retailer-supplier relationship should be on all of the attributes of the perfect order; suppliers should work toward meeting retailer POI objectives and retailers should be committed to measuring all aspects of a perfect order to accurately assess end-customer satisfaction.

About the Study

The Retail Compliance Council (RCC), an organization comprised of retailers is focused on vendor performance improvement through strengthening trading partner communications, chartered Compliance Networks, a leading provider of vendor compliance optimization solutions, Supply Chain Visions, a consulting firm specializing in performance management, and Georgia Southern University to benchmark how suppliers were actually performing against the 4 critical Perfect Order attributes. The study consisted of shipment data from April 2004 to August 2005 including:

- 7,026 suppliers
- 268,366 POs/orders to 5 well known retailers
- 4,929,878 UPCs/Lines representing 1,026,116,543 units

The study tracked the suppliers' performance in relation to the components of the perfect order. The result? Suppliers on average had a dismal 22.9% of their orders being perfect over the timeframe. Specifically, suppliers performed poorly in terms of on-time delivery and order completion (see Table I).

Table 1

	% On Time Delivery	% Complete	% Damage Free	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of Sample	51.7%	47.7%	100.0%	92.7%	22.9%

* A % Damage Free baseline of 100% was adopted due to data unavailability/inconsistencies.

By utilizing a perfect order index score, it is easy to see that suppliers have not performed well relative to retailer requirements, thus creating customer satisfaction issues for the affected retailers. The average across all 7000+ suppliers was a 51.7% on time delivery and 47.7% complete orders. On a positive note was the percentage of suppliers who achieved correct documentation – which was a surprising 92.7%. Clearly, these numbers support Pep Boy's David Schneider's and other leading retailers belief in the significance of this poor performance and its negative affect on the retailer's ability to meet the needs of its end customer.

Each of the components is explored below in detail.

Results of the Study

On Time Delivery

First and foremost, orders should arrive to the customer on time. The study found that only 51.7% of supplier orders achieved on time delivery over the course of the 16 month sample. But what is driving this disconnect? We believe there are two primary factors for poor performance in this area.

First, many suppliers and retailers are not on the same page with what it means to be 'on time'. One reason for this disconnect is that many companies do not measure "on time" the same way. A spring 2005 study published by the Warehouse Education Research Council highlights just how confusing this problem is for many of the suppliers. The study – which surveyed US based warehouses and distribution centers - asked respondents to indicate how exactly their customers defined On Time Delivery. The study revealed that nearly 70% of respondent's indicated their customers had varying definitions of On Time Delivery.

Specifically, most responses (42.7%) indicate customers feel that On Time Delivery means product delivered on the requested day. While getting product on time with regards to a specific day is the most common definition, a full 41% define On Time Delivery as being related to an even more specific appointment time (ranging from within 1 hour of the appointment time to within 15 minutes of the appointment time). Table 2 below shows a breakdown of the top responses of what it means to have On Time Delivery.

TABLE 2: VARIOUS ON TIME DELIVERY DEFINITIONS

Most Common Definition	Percent of Respondents
On the Requested Day	42.7%
On or Before Appointed Time	16.8%
On the Agreed Upon Day	15.9%
+ 30 Minutes From the Appointed Time	11.2%
+ 1 Hour From the Appointed Time	9.1%
+ 15 Minutes From the Appointed Time	4.3%

What is clear from all of this is that the goal of meeting an individual customer's service level definition for On Time Delivery can be difficult due to the lack of appropriately agreed upon standards and definitions across the industry. One supplier using a major ERP system had to custom write code that would calculate the information, by customer, for them to track. While there may be different definitions of "on time" – the retailers interviewed in the Retail Compliance Council study felt that a perfect order should be calculated as "on time" to the date/time requested by the customer (product shipped when the customer asked-not when a company can ship).

Insights into the second cause for on time delivery discrepancies can be learned by listening to the suppliers. We believe that the principle reason that delivery has not received the attention it is due owes to the fact that it is simply too hard to measure. A supplier can be fairly certain about when a product left their dock – but once the shipment is out of their hands and in the care of the transportation provider, suppliers often loose visibility. While leading transportation providers have made great strides in providing Proof of Delivery, actively tracking on time delivery to a specified pre-agreed time can be time consuming – or even impossible – for some suppliers depending on the carriers they use.

Complete Orders

Second – orders should be complete. In other words, all products and lines should have a 100% fill rate without any substitutions. Surprisingly, performance against complete orders was even worse than on-time delivery – with the average across the sample falling to 47.7% for the entire sample of shipment data. While it might be easy to blame the transportation provider for misses in on-time delivery – having a complete order falls squarely on the shoulders of the supplier.

Why the focus on a complete order? Two reasons. First, if the supplier only ships 9 out of the 10 products on the order, it means the customer may miss a sale. The most stringent definition of "complete" is to have a 100% unit fill rate for 100% of the unique lines/products on the PO. However, some retailers –

especially those that specialize in fashion apparel and seasonal goods – do allow for their suppliers to split an order. The reason? They'd rather have their suppliers go ahead and ship a partial order because that way they can at least begin to get some product on the store shelf.

The second reason retailers are beginning to focus more on complete orders is cost. Anytime an order has to be split, it means that the retailer will have to re-open that PO and go through the receiving activities for a second (or third or fourth) time. What this means is added distribution costs because in essence the retailer has duplicate costs every time they have to go through the receiving process again.

Damage Free

Third, orders must be delivered damage free to the customer. This damage free policy extends from product manufacturing to product distribution as well as mode of transportation to the end-customer. As mentioned above, we were unable to attain this data consistently across our sample size and as such have used a 100% performance "placeholder", assuming that all suppliers are perfect in this area for calculating the POI.

Accurate Documentation

Lastly, retailers expect and want accurate documentation. While many industries think about accurate documentation in the simple terms of having an accurate invoice, retailers are much more demanding. In particular, retailers want an accurate ASN which correctly outlines the items ordered, correct quantity, correct terms and the correct price. One reason accurate ASNs are becoming such a critical component of a shipment is that retailers are working hard to decrease their costs. By having an ASN, they can prepare their operations for the shipment in advance so they can deploy costs savings techniques such as cross-docking, automated receiving, etc.

Going into the study we felt that this would be the area where suppliers performed worst due to the fact that many retailers require stringent systems specifications for submitting ASNs. However, having correct ASNs was the area where suppliers performed best – with a whopping 92.7% of suppliers having accurate ASNs for all of their orders for the entire 16 month timeframe sampled.

While the study only measured performance against accurate ASN's, the retailers interviewed felt that having accurate documentation extended beyond ASNs to include accurate labeling and invoicing.

Is it Possible to be Perfect?

A key part of the study was to benchmark what was "best practice" with regards to the perfect order. As such, the study examined those suppliers who were considered to have the best perfect order practices (top 20% of the sample of 7000 suppliers) to determine their average component and POI score. The results show improvement, but the average POI score (62.4%) still remains at a level that most, if not all, retailers would not consider acceptable (see Table 3).

Table 3

	% On Time Delivery	% Complete	% Damage Free	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of Sample	51.7%	47.7%	100.0%	92.7%	22.9%
Best Practice Average for Sample (Avg of the top 20%)	83.6%	76.3%	100.0%	97.8%	62.4%

* A % Damage Free baseline of 100% was adopted due to data unavailability

These results would seem to indicate that it is impossible for a vendor to be "perfect" in meeting the retailer's expectations for each component of the perfect order. However, a closer look at the data in the study shows that this is not true. If you consider the best vendor results by each component, the study shows that a 100% performance score can be achieved for each element of the perfect order (see Table 4).

Table 4

	% On Time Delivery	% Complete	% Damage Free	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of Sample	51.7%	47.7%	100.0%	92.7%	22.9%
Best Practice Average for Sample (Avg of the top 20%)	83.6%	76.3%	100.0%	97.8%	62.4%
Best Vendor Results	100.0%	100.0%	100.0%	100.0%	100.0%
Perfect Vendors in each category	668	489		1,431	
% of Perfect Vendors within Sample	9.5%	7.0%		20.4%	

* A % Damage Free baseline of 100% was adopted due to data unavailability

As you can see, there are a number of vendors who are able to achieve "perfect" status by component and POI score. But what about achieving the ultimate goal of being a perfect supplier across *ALL* attributes of the perfect order? Is it possible? The answer is YES. In fact 135 of suppliers in the study achieved this status – offering encouragement to retailers and suppliers who are beginning to implement their perfect order strategy within their organizations.

While the majority of these suppliers have fewer and less complex orders, the feat ***is*** achievable. But what sets apart a supplier as perfect? Do they do things differently? Have they invested huge sums of money in their infrastructure? Below are some trade secrets that researchers have observed through working with suppliers.

- Understand performance from the customer's perspective

- Work with transportation providers that provide Proof of Delivery. If you don't know that your carrier is not delivering on time, then how can you work with them to improve their performance?

- Be zealous about performance management. Align metrics within your organization to the attributes of the perfect order.

- Communicate the importance of your perfect order strategy throughout your organization, consistently and frequently.

Retailer Perspective

While the Perfect Order Index is not currently a widespread metric that is actively being deployed today, retailers are starting to embrace the perfect order philosophy and are committed to incorporating each attribute within their business processes to arrive at a more complete measure of customer satisfaction. While retailers may not always calculate the POI, most of the leading retailers do measure each of the key attributes. Retailers – as well as many other leading companies – are starting to look at their suppliers from the Perfect Order point of view because it helps them focus on the big picture of their entire supply base process and understand the impact of performance fallout in that process. A quick review of the vendor routing guides of several leading retailers indicate that these companies are addressing the attributes of the perfect order in their vendor requirements.

Pep Boys, a retail chain that specializes in automotive parts and accessories, has been measuring the components of the perfect order for many years. David Schneider realized: "We had to measure performance before we could manage it." Pep Boys places emphasis not just on receiving an order from a supplier on time and complete but also getting comprehensive and accurate documentation with the order. In conjunction with their perfect order focus, Pep Boys has also instituted a compliance fee program with it's suppliers to help meet its performance goals for each component of the perfect order. `

Stage Stores, a specialty department store retailer, has also seen the relevance of the perfect order philosophy. Gough Grubs, Senior Vice President of Distribution and Logistics, adds: "We are in the process of collecting information on all of the features of the perfect order to assist us in capturing an internal measure for vendor profitability." One key aspect of Stage Stores' perfect order initiative involves an educational development with all of its vendors to reinforce the importance of the perfect order and their responsibility to meet the retailer's perfect order metric objectives. Their development of a Vendor Set-Up form tied to their perfect order viewpoint allows the supplier to understand the necessary requirements to effectively conduct business with Stage Stores.

Gottschalks, a regional department store chain, has chosen to customize their perfect order index by expanding the number of elements within their index to over 100 "rules". These elements are measured internally through automated processes. Marc Elmo, Vice-President of Distribution, recalls: "We started measuring vendor compliance 4 years ago. In the past we only had 12 "rules" for vendor compliance, but by putting automated processes in place we now have over 100 "rules" which allow our buyers to really see how a vendor is doing. In our old manual process, it could take up to 45 days to notify a vendor about a problem with an order." By taking a holistic perfect order approach and automating their measurement capabilities, Gottschalks has shown significant improvement within many aspects of their perfect order index.

The cost of non-performance can be great. Home Depot has been able to quantify what happens when the order is not perfect. For example, when a product without a UPC or an invalid UPC arrives at the register, customer service is impacted in the following areas:

- Transactions are delayed 3 minutes and 32 seconds
- Two additional customers are impacted
- $.79 shrink per No Mark occurrence
- $.57 shrink per NOF occurrence
- Issues are incorrectly resolved 28% of the time
- Sales floor associate is involved 39% of the time

Pep Boys estimates that it carries $2 to $3 million in excessive safety stock within its distribution network due to not having product on-time and complete. At Gottschalks, merchandise can sit in their distribution centers for up to 2-3 weeks due to incorrect documentation issues. Measuring the key attributes of the perfect order and establishing effective processes to address non-performance issues are key to reducing this cost.

Vendor Perspective

One software vendor has begun embracing the perfect order philosophy by examining how their customers measured their performance. In the past, this supplier relied on fill rate as the primary measure of customer satisfaction within their organization. However, after customer complaints of less than optimal performance, the supplier formed a team to investigate the "performance disconnects" with the retailer. One of the key discoveries involved the measurement of on time performance-the vendor tracked on time shipments while the retailer tracked on time delivery. As a result, this supplier adopted a new customer focused definition of on time (expected delivery time) in order to satisfy the retailer's expectations. This effort by the vendor has led to increased levels of customer satisfaction as well as award recognition within the industry.

Another company exploring the Perfect Order is Moen Inc., a manufacturer of plumbing products. Moen has started moving toward the perfect order concept by customer request. Traditionally, Moen's customers used line fill rate to measure their satisfaction. However, this is changing based on the evolving needs of Moen's customers and their shift toward the perfect order concept. Today, areas of measurement at Moen are based on what is important to its external and internal customers and metrics are developed in collaboration with internal and external supply chain partners to reflect these areas of importance. Many components of the perfect order are now being examined and measured within Moen and the collected data is being shared at several levels within their organization.

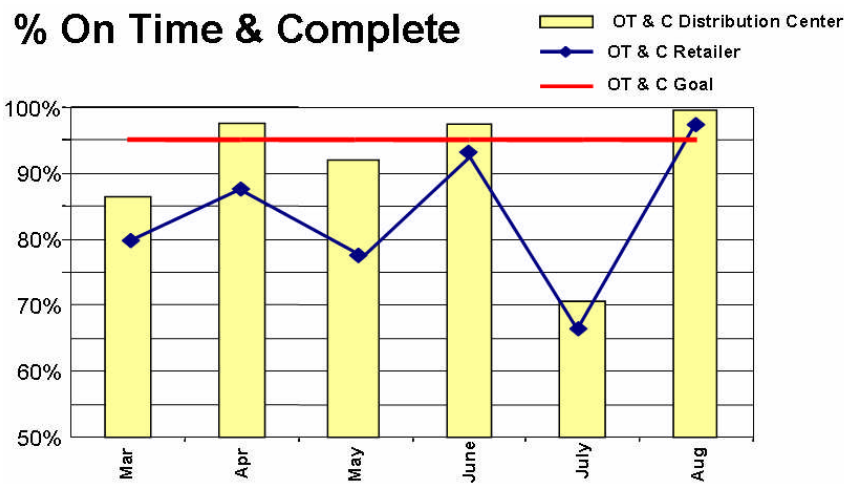
How to implement a Perfect Order philosophy within your organization

As a retailer, how can you apply a perfect order philosophy to your relationship with your suppliers? The good news is that many companies are already collecting data for many of the components involved in a perfect order. To start the process, here are five recommended steps:

- Find out what metrics are currently being employed within your organization
- Determine the definition of the metrics and communicate across the organization
- Determine how often the metric will be calculated (by week, month, customer, etc)
- Put someone in charge who will be responsible for the measure
- Set a realistic goal

It is also important to note that a collaborative relationship should be developed between the retailer and the supplier. Compliance Networks has found that retailers who have begun this process of supplier measurement have shared the data they have collected internally with their suppliers in order to emphasize the importance of working together to achieve a perfect order index objective.

One way to share this data with the supplier is to "map" the service level performance the retailer is reporting versus what the supplier is reporting to determine any "gaps" in performance. Many times the reason for these "gaps" is that the supplier's calculation and definition of the performance differs from the retailer's calculation and definition (see example next page).



By "mapping" the performance, retailers will be able to identify real "gaps" as opposed to "gaps" of perception.

Utilizing companies such as Compliance Networks to automate key processes for perfect order measurement can assist retailers in focusing on those metrics that are most central to their perfect order viewpoint. In today's customer driven environment, suppliers and retailers should be concerned with the fundamental question of "Did the customer get the product they wanted, when they wanted it and how they wanted it?" Adopting a perfect order strategy as a retailer and creating a perfect order expectation with your vendors will positively impact future customer satisfaction levels as well as help you retain existing customers and gain new ones.

About the Retail Compliance Council

The Retail Compliance Council (RCC) is focused on vendor performance improvement through strengthening trading partner communications. Through our efforts, we help improve trading partner profitability.

We address one of the most fundamental challenges for management today – aligning hundreds or even thousands of diverse vendors to your corporate objectives. Failure to achieve vendor alignment can lead to supply chain disruption, customer dissatisfaction, lower profitability and deteriorating shareholder value.

The Retail Compliance Council, with its sister organization, the Vendor Compliance Federation offers one of the industry's most unique models, blending industry benchmarking, trading partner conferences and peer exchanges, mixed with customized surveys, retailer specific seminars, and B2B exchanges.

Isn't it time your company made supplier performance management a strategic priority