

Scorecards for the Supply Chain - The Perfect Order -

Kate Vitasek

Managing Partner, Supply Chain Visions

Faculty, University of Tennessee

Agenda

- The What and Why of the Perfect Order Index
- Case Study
- Retail Compliance Research on Inbound Perfect Order from Vendors
- Tips to Get Started

What Do Typical Warehouses Measure?

The number one metric used by warehouses is on-time shipments, NOT on time delivery. And definitely not a perfect order.

Rank	Measure Used	Percent Using	Average Performance (1)	Best Practice (2)
1	On-time shipments	96%	98%	99-100%
2	% of overtime hours	92%	10%	0-4%
3	Inventory count accuracy (% by units)	91%	99%	100%
4	On-time receipts	90%	92%	98-100%
5	% orders shipped complete	87%	96%	99-100%
6	Order picking accuracy (% by order)	84%	99%	100%
7	Annual work force turnover	83%	10%	0-3%
8	% of orders shipped without errors	83%	99%	100%
9	Fill rate-order	81%	96%	99-100%
10	Average warehouse capacity used (% used ÷ total capacity)	81%	85%	93-100%
11	On-time delivery	81%	Varies by definition	

Source: 2005 DC Velocity / WERC Metrics Study

You have a 99% fill rate.

Is this Good?

What is a Perfect Order?

The Perfect Order is an index using four key supply chain metrics.

- On Time
- Complete
- Damage Free
- Correct Documentation



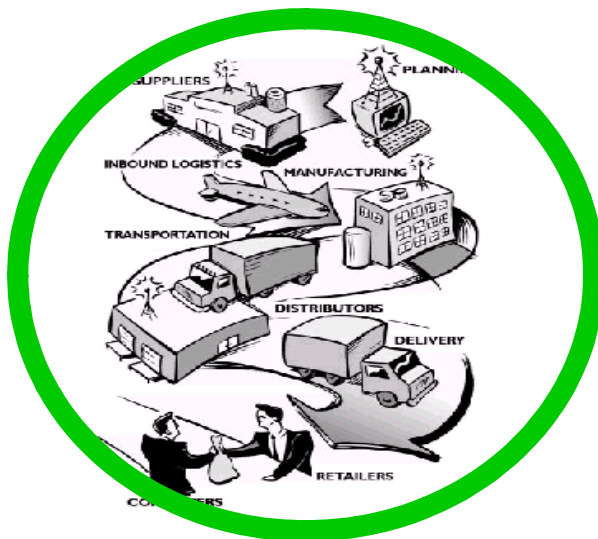
While Retailer routing guides vary greatly, almost ALL retailers require these four basic requirements

Example Calculation of the Perfect Order

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

Why Index???

- Indexing – rather than looking at each metric individually – helps you understand the overall impact of missing any of the elements.
- Use a telescope in conjunction with a microscope. A telescope looks at the biggest picture, and the long-term considerations. A microscope provides the drill down.



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What's the Point of a Metric: Process vs Results Metrics

- Results Metrics
 - Usually functionally oriented
 - Usually focused on one aspect of a process
 - Measures components of a process – but not the whole process
 - If left unchecked, drive sub optimization
- Process Metrics (such as the Perfect Order)
 - Are usually company-wide or customer focused
 - Are cross functional in nature (and sometimes cross company)
 - Measure the “total effect” of a process
 - Drive overall optimization of costs and customer satisfaction

Why the Perfect Order?

- Ultimate measure of a customer's order
- AMR Study
 - Only about 80% of orders in the US are perfect
 - 11% of orders are not delivered on time
 - Stock outs
 - Late shipments
 - Transit delays
 - Multiple deliveries
- Helps reduce costs

Cost of Doing “Wrong”

- Physical cost to fix the error
 - Labor cost for multiple shipments in backorder and additional freight
 - Providing replacement product
 - Refunding purchase price
 - Providing credit
 - Cost of processing additional receipts for multiple shipment
- Penalties
 - Retail compliance fees come straight from profits
- Lost revenue
 - Cost of lost sales
 - Cost of lost customers

Cost of Non-Performance to the Retailer

- Home Depot
 - Product without or invalid UPC
 - Transactions delayed 3 minutes 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 in their DC's
- Gottschalks merchandise can sit in their DC's up to 2-3 weeks due to incorrect documentation

Additional Benefits of the Perfect Order

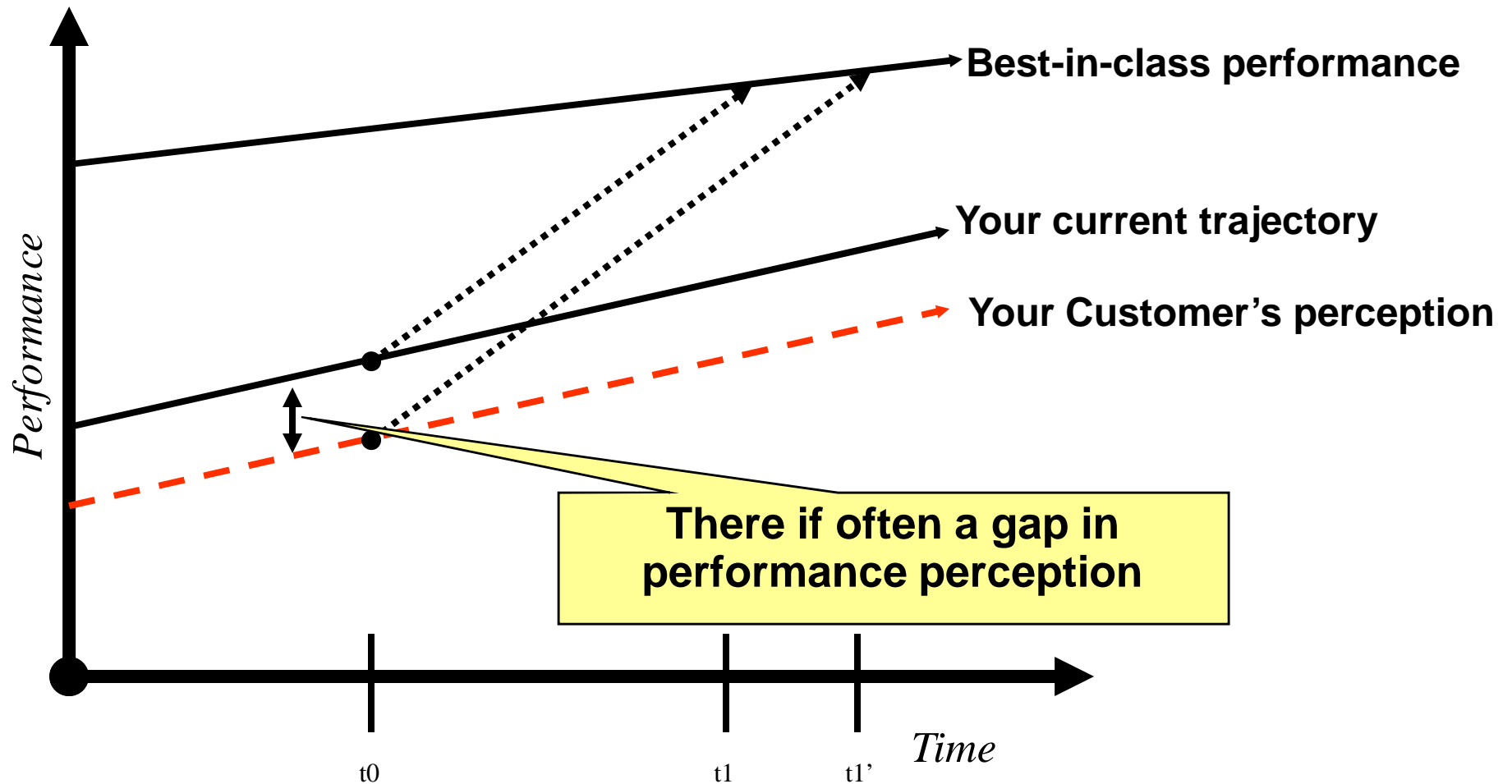
A recent study by AMR Research found a correlation between Perfect Order performance and some key financial and market indicators...

- **Earnings Per Share (EPS)** – An increase of 10 percentage points in the perfect order rating correlated to 50 cents better earnings per share
- **Return on Assets (ROA)** – Companies with better perfect order ratings tend to have better ROA. 5 percentage points correlates to 2.5% better ROA
- **Profit Margins** – A 3 percentage point better perfect order rating correlates with 1% additional profit margin

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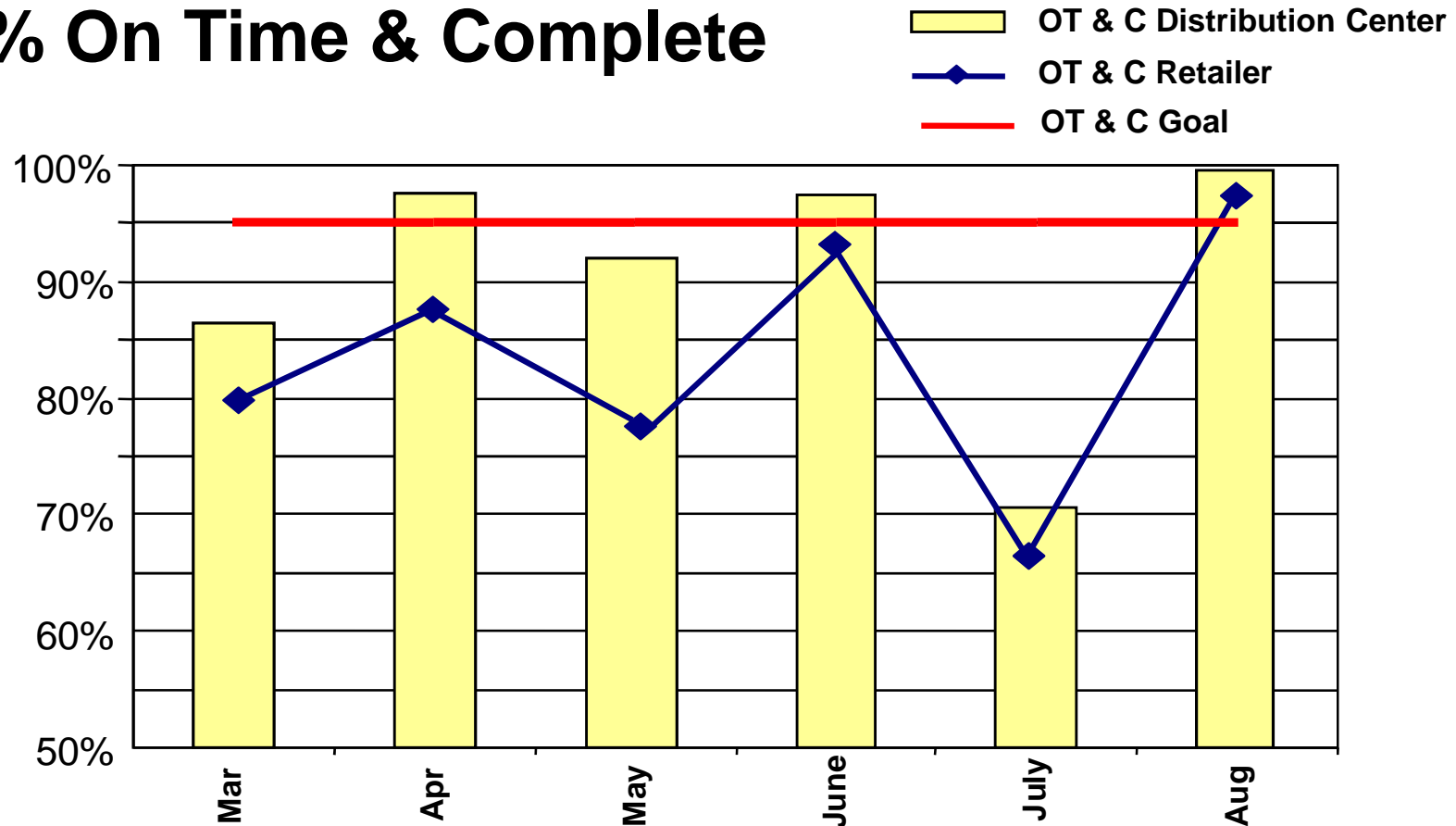
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- ***Case Study***
- Retail Compliance Research on Inbound Perfect Order from Vendors
- Tips to Get Started

Perceptions Gaps



Intuit Case Study

% On Time & Complete



Customer Benchmarking showed the DC was consistently reporting higher level of OT&C

Intuit Case Study

- What is On Time?
 - Fill rate vs on time shipments
 - On time shipments vs on time delivery
 - On time delivery vs on time and complete
- Order is coded into ERP to automatically insert customer business rules into the shipping process
 - Customer orders on Wed and wants it next Wed
 - If their retail store is in Seattle it goes out on Monday
 - If their retail store is in Salk Lake City it goes out on Tuesday
- Systemic way to flush Proof of Deliveries
- Retailer Scorecard Reviews
 - Won the Supply Chain Partner of the Year from Staples

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- The What and Why of the Perfect Order Index
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- ***Retail Compliance Research on Inbound Perfect Order from Vendors***
- Tips to Get Started

About the Study

- Chartered by the Retail Compliance Council
- Researchers
 - *Kate Vitasek*
Managing Partner
Supply Chain Visions
 - *Dr. Karl Manrodt*
Associate Professor
Georgia Southern University
 - *Richard Wiljehm*
Compliance Networks, Inc



About the Study

Goal: Track supplier performance
in each of the Perfect Order components

- 7026 supplier shipments from April 2004 to August 2005
- 268,366 POs/orders to 5 well known retailers
- 4,929,878 UPCs/Lines representing 1,026,116,543 units

About the Study

- Sample includes ALL shipments to selected retailers from ENTIRE supply base
- Retailers chosen used Compliance Networks service to track all of their inbound shipments
- Study was only able to collect data on 3 of the 4 Perfect Order attributes (Quality was not captured due to data availability/consistency of the data)

Overall Study Results

	% On Time Delivery	% Complete	% Damage Free *	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of Sample	51.7%	47.7%	100%	92.7%	22.9%

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

Best Practice vs Average Benchmarks

	% On Time Delivery	% Complete	% Damage Free *	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of the Sample	51.7%	47.7%	100%	92.7%	22.9%
Best Practice Vendor Average for Sample (Top 20%)	83.6%	76.3%	100%	97.8%	62.4%

Best Practice Vendors show improvement in every individual metric which converts to a considerable improvement in POI score

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

Are Some Retailers Better at Managing Their Supply Base Than Others?

	% On Time Delivery	% Complete	% Damage Free *	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of the Sample	51.7%	47.7%	100%	92.7%	22.9%
Best RETAILER in Sample	81.4%	54.3%	100%	97.6%	42.7%

The Best Retailer in the study scored had a POI almost **DOUBLE** that of the average sample.

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

Is it Impossible for a Vendor to be
“Perfect” ?

NO

Retail Study Results

	% On Time Delivery	% Complete	% Damage Free *	% Correct Docs (ASN)	POI
	Orders	Orders	Unit	Orders	
Average of the Sample	51.7%	47.7%	100%	92.7%	22.9%
Best Practice Average for Sample(Top 20%)	83.6%	76.3%	100%	97.8%	62.4%
Best Vendor Results	100%	100%	100%	100%	100%
# Perfect Vendors By Category	668	489	NA	1431	
% of Perfect Vendors within Sample	9.5%	7%	NA	20.4%	

SLC1

- Vendors can achieve “perfect” status for each category – and even for the entire order!
- 135 vendors achieved 100% “perfect” status in each attribute for an ENTIRE 16 months!

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

Slide 25


SLC1

This number came from Compliance Networks Data

Sandy Curtis, 6/20/2007

Example: Cost of Non-Performance to the Retailer for a Replenishment Item

Cost of Item	Daily Sell Through	Inventory Needed		Total Cost of Product on Hand	Inventory Carrying & Handling Cost	
		Avg Days on Hand	Inventory Turns		%	\$ Cost
\$10	10	30	12	\$3,000	15%	\$450
\$10	10	37	9.86	\$3,700	15%	\$555


19% Increase
if 1 Extra Week
of Inventory is Held

A conservative estimate shows that for every UPC/Line that is late there is an estimated cost impact to the retailer of 19% of the value of the product.

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Tips for Getting Started

- Know how your vendors are performing
 - Scorecarding helps accomplish this
- Educate, Educate, Educate your vendors
 - Get on the same page with metrics definitions
 - Share vendor scorecards and their rankings with them....vendors hate to know they are on worse than their competitors
- Use the data to drive results
 - What is causing you the most issues?
 - Create projects or initiatives to drive improvements with top suppliers in these areas

Questions? Pick up a Copy of the Full Report

Kate Vitasek
kate@scvisions.com

