

WERC WATCH®

A Periodic Assessment of Industry Trends

PROVIDED BY AND FOR WAREHOUSING PROFESSIONALS



WERC joins forces with DC Velocity magazine to conduct a second annual study of benchmarking measures used in logistics.

DC Measures

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“What should I measure?”

“How am I doing compared to everyone else?”

“Are the measures I use right for my strategy?”

Questions like these are the bane of distribution. In an effort to provide members with improved guidance regarding the use of measures across a DC, the Warehousing Education and Research Council (WERC) has joined forces with *DC Velocity* magazine to conduct a second annual study of benchmarking measures used in logistics. This year’s study is being done in partnership with Georgia Southern University and Supply Chain Visions—both well-respected organizations in the

area of performance measurement and performance management.

The study set out to help practitioners:

- Identify the most commonly used distribution measures
- Understand benchmark data across key measures by industry and type of business
- Understand the importance practitioners are placing on various measures
- Link key measures by industry types, supply chain structure and overall strategy
- Understand the cultural impact of performance measurement

This year’s study received the support of 530 WERC members and *DC Velocity* readers; of these, 384 provided usable responses that are used in this analysis. They were asked questions about 55 key measures commonly used in a distribution environment. When the tabulations > **Pg. 2**

Call to Action

Overall, what we see from this survey is encouraging. There continues to be improvement in the use of measures by companies, and the measures used are becoming more balanced. However the profession still has a long way to go with respect to standardization of measures across the supply chain and in particular within specific industries.

Our first call to action is to recommend that specific industry groups mount an

effort to identify and disseminate those measures which seem to be specific to their members. They could work within their membership, and with non-member companies who are a part of their industry, to gather and disseminate benchmark data which can be used to evaluate performance against the group.

While management is seemingly conveying the purpose of the company, its goals and objectives—there is still

much work to be done to close the gaps between strategic direction and measures used. Our second call to action is that companies should focus on ensuring alignment and balance. Specifically, senior management should work with their DC personnel to ensure that all management, line managers and staff craft a balanced set of measures which can be used to support management’s goals.

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Figure 1. Respondents by Title

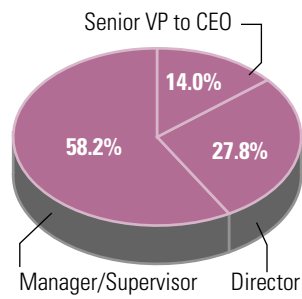


Figure 2. Respondents by Industry

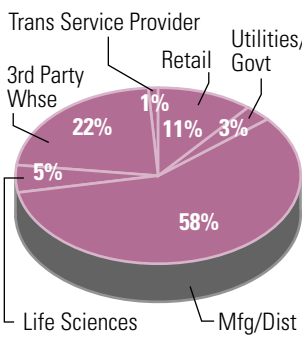
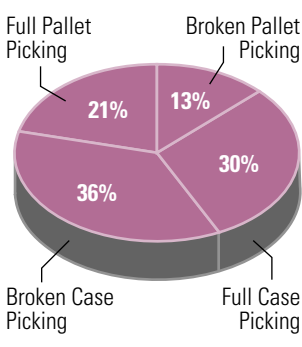


Figure 3. Respondents by DC Operation



were completed, the research team was able to see some clear indications of how companies are using performance measures.

Participant Profile

The majority of the respondents to this year's survey had a title of manager or supervisor. Over 40% were at the director, senior vice president or higher level within their company. This closely aligns itself to the membership of WERC, as well as the readership of *DC Velocity*.

It should be noted that this group may be a more positive sample, as a whole, given their readership of a leading distribution magazine, or their involvement with a premier warehousing and distribution association. These groups tend to attract high performers and those wishing to continually improve their operations.

One of the most important rules in benchmarking is to benchmark with an appropriate partner. Mismatches in fundamental processes and procedures can lead to frustration and failure. For instance, benchmarking a high school football team to a professional soccer team may have some unintended consequences. Some of the same measures are used in both, but are weighted differently. Other measures may be similar on the surface only, or may not be applicable at all causing confusion and misuse.

For this reason the survey team wanted to understand the differences in how companies used performance measures based on their unique business situations. As such, the team did statistical analysis on the responses based on various demographics of the survey response base. Five unique demographic areas were considered:

- Industry type
- Type of operation
- Type of customer
- Business strategy
- Size of the company

Throughout this report we point out where differences existed that were statistically significant.

Demographics by Industry Type

Figure 2 provides a breakdown of the various business segments that participated in the study. The manufacturing/distribution segment totaled 58%, of all respondents, with the second largest group being in the 3rd party warehousing

Table 1. Industry Breakdown

Business Segment	Breakdown
Manufacturing/Distribution	Consumer products
	Aerospace/defense
	High technology
	Automotive
Life Sciences	General
	Pharmaceuticals
	Medical devices

segment which had 22% of the total response base. A further breakdown of the manufacturing/distribution and life sciences segments can be found in Table 1.

Demographics by DC Operation

Respondents were also segmented based on how goods moved through their distribution center (Figure 3). The majority of facilities (66%) are focused on case picking. Note that the majority of those picking cases are doing broken case picking, and the majority of pallet picking is by full pallet. Clearly, these represent two ends of the continuum as it relates to DC operations.

How were firms classified into these categories? After all, many operations consist of both broken case and full case picking. For classification, at least 50% of the respondent's activity had to be in one of the four classifications. For instance, for a company to be placed in the "broken case picking" category, the respondent had to report that at least 50% of their operations were done this way. Those firms that tied in two classifications (50% each) or where no classification was greater than 50% were not used in the final benchmarking analysis.

Demographics by Type of Customer Served

Another important consideration is the position that the company holds in the supply chain. The research team was curious to learn if companies that are "upstream" suppliers used a similar set of measures to that of their customers or their customers' customers.

Respondents were asked to classify who their primary customers were in the supply chain. Figure 4 is a summary of responses received. Nearly one-third (30%) of those responding indicated that their customer was the end user of the products or services they provide. This is

in line with the high percentage of respondents that came from the consumer products area. Another 29% work for companies who sell direct to retailers. The remaining respondents' primary customer is either a manufacturer (22%) or a distributor (19%).

Demographics by Business Strategy

How does a company's strategy impact the measures that are used? Do different strategies place a higher emphasis on some measures and not on others? At what level in the organization should these differences be seen or noticed?

To start the process of answering these questions, we asked respondents to indicate the overall business strategy for their business unit or division. Specifically, we asked if the firm's strategy was to be a cost leader, a customer service leader, an innovator, or to be all things to all people.

We found that the majority are focusing on customer service (46%) while cost leadership (12%) and product/market innovation (9%) are the least-cited strategies. The second largest group is focused on being all things to all people, a combination of the other three strategies. This is an interesting finding, in that studies in past years have found a significantly higher number of companies placing a greater emphasis on cost leadership.

Demographics by Company Size

The last major demographic considered was annual sales revenue, as a measure of the company's size. It is hypothesized that larger firms may use more measures than smaller firms, or place greater emphasis on specific measures. From Figure 6 we can see that nearly 75% reported sales of less than \$1 billion and the largest group of respondents fell in the less than \$100 million size category. Again, this closely mirrors the membership of WERC.

What the Data Said

As mentioned above, the team wanted to identify what performance measures are being used, how important these measures are in the company, as well as how companies are performing. To do this, the research team looked at three areas for each of the 55 measures in the survey. Here's a brief description of each.

- Usage: The team wanted to identify which measures were used the most frequently.

Usage is calculated two ways. First, we asked respondents to indicate if a measure was used or not used within their firm to calculate the overall usage rate for each measure. This provides our use/do not use percent.

- Not all respondents answered each question. This led to the second calculation, in which those that use the measure are divided by all survey respondents (n = 384).
- Importance: In order to gauge the relative value of a measure, we asked respondents to indicate the importance (1-very important, 2-important, 3-neutral, 4-not important, 5-not very important).
- Actual Performance: Actual performance for measures was also asked in order to gauge the "Median" and "Best in Class" performance benchmarks. "Median performance" is the most common response for each of the measures. Unlike an average, the median is not easily swayed by outliers in the data. The "Best Practice" value is drawn from the responses that ranked in the top 20% for each particular measure.
- Example: Suppose 300 companies indicated that they use "inventory days on hand" as a key measures and that actual performance ranged from 10 days to 90 days on hand. The "top" performers were the ones that fell into the top 20th percentile when ranked by actual performance. The "best practice" would be determined by calculating the range of the top 60 out of 300 responses for that particular measure.

Figure 4. Respondents by Type of Customer

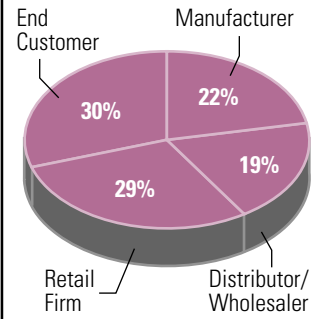


Figure 5. Respondents by Business Strategy

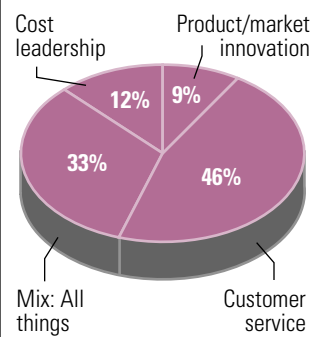


Figure 6. Respondents by Company Size

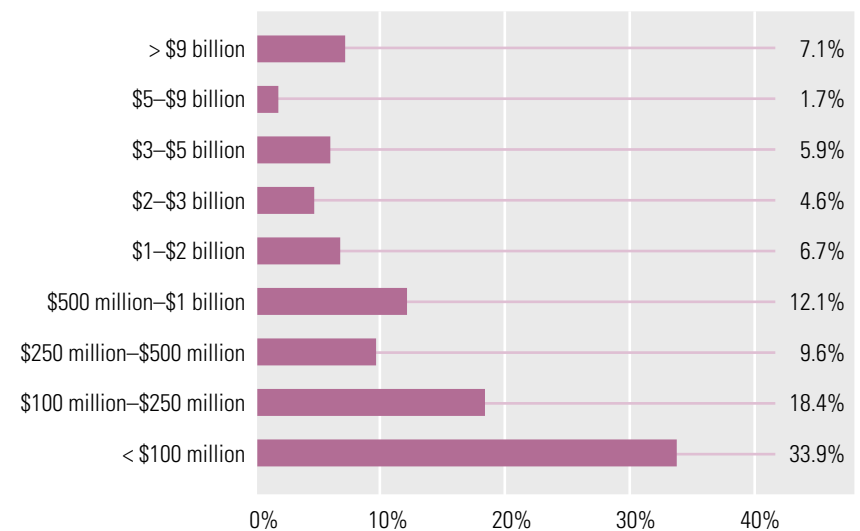


Table 2. Top Measures and Benchmarks

Rank	Measure Used	Reported Usage	Usage as a % of All Respondents	Median	Best Practice
1	On-time shipments	96%	74%	98%	99-100%
2	% of overtime hours	92%	69%	10%	0-4%
3	Inventory count accuracy (% by units)	91%	58%	99%	100%
4	On-time receipts	90%	70%	92%	98-100%
5	% orders shipped complete	87%	65%	96%	99-100%
6	Order picking accuracy (% by order)	84%	53%	99%	100%
7	Annual work force turnover	83%	49%	10%	0-3%
8	% of orders shipped without errors	83%	53%	99%	100%
9	Fill rate-order	81%	61%	96%	99-100%
10	Average warehouse capacity used (% used ÷ total capacity)	81%	52%	85%	93-100%
11	On-time delivery	81%	70%	Varies by definition	

Figure 7. Best Practices for Top Measures

On time shipments	
Greater than 99%	36.8%
97–99%	23.9%
95–97%	14.4%
93–95%	5.3%
90–93%	12.9%
Less than 90%	6.7%
% of overtime hours	
Greater than 15%	27.2%
12–15%	8.1%
9–12%	16.8%
6–9%	15.6%
3–6%	20.8%
Less than 3%	11.6%
Inventory count accuracy	
Greater than 99.5%	41.9%
99–99.5%	15.5%
98.6–99%	2.0%
98–98.5%	10.1%
97.5–98%	0.7%
Less than 97.5%	29.7%

Topping Out the Measures List

Based on this year’s responses, the most popular measures (those with usage percents in excess of 80%) across all demographics and the related performance benchmarks are shown in Table 2.

Top 3 Measures

While it is good to know the “Median” and the “Best Practice” performance, it is also good to understand the breakdown of overall responses. The tables in Figure 7 provide details for the top three most frequently-used measures.

How Important Are the Top Measures?

If a measure is being used by a wide range of companies, they must view it as being helpful or positive to the firm. Figure 8 shows how respondents ranked the five most frequently used measures. Level of importance was determined by asking if a particular measure was:

- Very Important
- Important
- Neutral
- Not Important
- Not Very Important

Figure 8. Measures Rated Important or Very Important

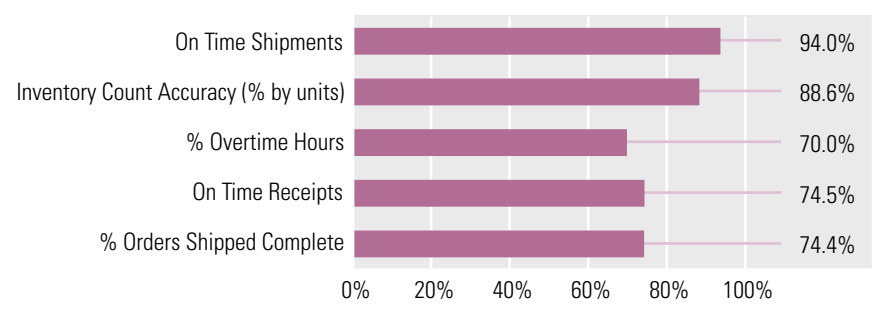


Figure 8 shows two key points of interest. The first is the fact that “on-time shipments” not only received the highest rating among respondents for usage, but it is also considered the single most important measure; 77% of the 94% of respondents indicated it was “very important.”

The second point of interest is that only 6 of the 55 measures received a combined importance

ranking (*important or very important*) of 75%. The importance placed on measures may be a function of the demographic considerations noted above, or the result of what companies have been measuring for the past several years.

Fuzziness Over On-time

So why did more of the respondents measure “on-time shipment,” rather than “on-time delivery?” For one thing, it’s a whole lot simpler. Tracking when an order ships is a simple matter; it’s much tougher to obtain reliable data on precisely when the order was delivered. And, given our respondent base of DC managers, it could be that this measure more accurately reflects their daily responsibilities.

Another, more intractable, problem is the apparent confusion surrounding exactly what’s an “on-time” delivery. When asked whether their customers defined on-time delivery differently, nearly 70 percent of the respondents answered *yes*.

How much variation could there possibly be in the definition of “on time?” Apparently, quite a lot. Many respondents (59.9%) indicated their customers simply defined an on-time delivery as a delivery on the requested or agreed-upon day. While getting product on time with regards to the specific day is the most common definition, others were more exacting—wanting delivery within specific parameters around an appointment time.

A full 41% of the respondents said that “on time” meant delivery at an appointed time, or at least within a 1 hour window of that appointed time. Still others reported different definitions, including “No line down time” or “By 4:00 p.m.” This lack of agreed-upon standards and definitions goes a long way toward explaining why some suppliers have difficulty delivering “on time.” Table 3 provides a breakdown of the definitions and performance for the measure “on-time delivery.”

Benchmarking the Perfect Order

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 because of the lack of appropriate agreed-upon standards and definitions. Unfortunately, this level of confusion does not always make for a happy customer because there are often

Table 3. On-Time Delivery Measure

	Percent Using	Actual Performance	
		Mean	Median
On or before appointment time	16.2%	94.3	97.0
+ 15 minutes from the appointment time	4.5%	93.6	93.5
+ 30 minutes from the appointment time	10.5%	96.8	98.0
+ 1 hour from the appointment time	8.9%	95.7	97.4
On the requested day	44.1%	94.0	96.0
On the agreed upon day	15.8%	93.9	96.5
Average Performance—Overall		94.5	97.0

other factors involved in the scope of customer satisfaction.

For example, customers will also want to know they received complete and accurate orders along with a variety of other factors. One of the most widely-recommended measures that can be utilized to help close this gap is the Perfect Order Index (POI), which indicates that four basic elements be in place to have a successful order fulfilled to a customer.

The right items are:

1. Delivered to the right place
2. At the right time
3. In defect-free condition
4. With the correct documentation and pricing/invoicing

In short—no matter who the customer is—most customers want these four basic features to be fully satisfied.

Despite the importance placed on the perfect order, nearly 60% of respondents do not use the

Figure 9. Importance of the Perfect Order

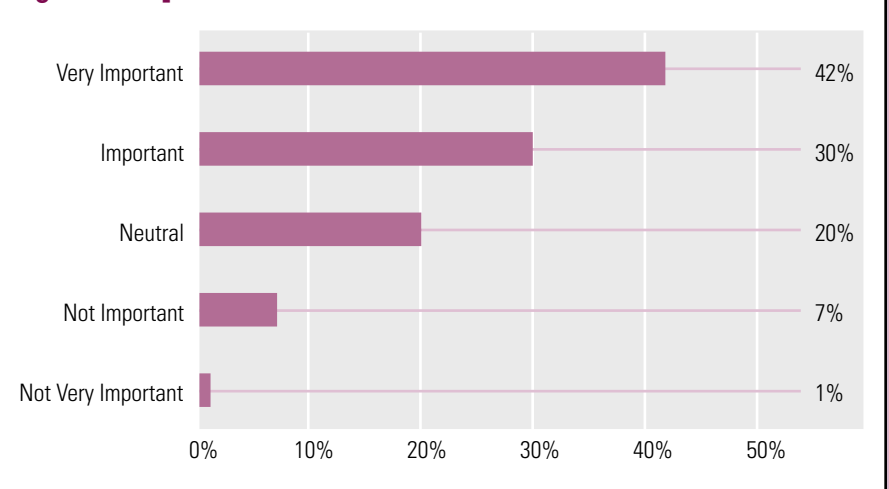


Table 4. Do You Use the Perfect Order Measure?

No	59%
Yes	41%

Table 5. Different Definitions Yield Different Results

Perfect Order Index Defined As:	Components Multiplied	Components Averaged
Index with all four components	85.5%	96.1%
Index with three components	87.5%	95.7%
Average for all respondents	86.6%	95.9%

measure. On the positive side—the majority of respondents feel that the POI is an important measure—with 72% indicating it is either *very important* or *important* to measure.

We believe that as more companies expand their use of measures to include elements of the full supply chain, including those customer-facing measures that comprise the POI, they will begin to see the value in the Perfect Order Index and make more extensive use of it.

With that said, what was the benchmark for the Perfect Order? How well are firms performing? According to our survey respondents, their Perfect Order Index exceeded 91.5%, with a median response in excess of 96%. While WERC members can be expected to be industry leaders, this self-reported number seemed somewhat high. Using the individual components that comprise the Perfect Order, our calculations show an Index of 85.5%.

This highlights another point regarding the Perfect Order Index: how is it being defined and calculated? If the components are merely averaged together (adding up the performance of on time delivery, damage free, complete and correct invoice) the responding value of 96.1% comes closer to the results reported by the respondents. Where incomplete data exists (only three of the

four measures were reported) the Perfect Order Index was 87.5%, or higher than when all four components were used. Intuitively, this makes sense given the impact multiplication will have on the numbers. This is further verified by the minimal drop in the average as noted in Table 5.

What does all of this mean? It would appear that the Perfect Order Index is not fully understood. What is needed is not a new definition of the Index, but more consistent communication of how it is being defined.

No Function Is an Island

During last year’s study of measures, we noticed that more emphasis was placed on functional measures, without regard to an overall business plan or the profitability of the company. This emphasis can lead to optimization of each of the functional components, but a sub-optimization of the system.

One symptom of a sub-optimized system would be an inordinate focus on one set of measures over another set. For instance, a firm could be placing too much emphasis on operational measures, and very little emphasis on customer service measures.

As noted in Table 2, the majority of the most popular measures were associated with capacity and quality. On the other end of the continuum, most of the least-used measures were financial in nature. The 10 least-used measures are shown in Table 6.

Again, it appears that the respondents are not focusing on the bottom line or on corporate goals and objectives as much as they are pursuing operational excellence. This result is even more interesting given the number of senior managers that participated in the study.

We believe that there should be a more even distribution of the types of measures used, to include areas typically found in the “Balanced Scorecard” matrix which has become so popular. The “Balanced Scorecard” is one that meets the needs of the organization based on its strategy, industry, and location in the supply chain. Merely

Table 6. Least-Used Measures

Measure Used	Usage*	Usage as a % of All Respondents
Honeycomb percent	47%	29%
Indirect distribution cost as % of total cost	44%	29%
Average cubic capacity used	42%	27%
Days of raw materials on hand	39%	27%
Equipment cost per unit/case/pound	39%	26%
Revenue per full-time equivalent worker	38%	21%
Cases/units shipped per equipment hour	37%	19%
Pounds shipped per worker hour	32%	22%
Average value of backorders as % of sales	32%	18%
Value added per employee	20%	11%

*Does not include respondents who did not answer this question.

adopting a scorecard of a partner or competitor is not enough.

Measures Vary Based on DC Demographics

One of the research team’s suppositions was that measures need to be taken in context. That is, “like companies” should be benchmarked against other “like companies.” For instance, if the results of a benchmarking study consisted of 10 high school football teams and 3 NFL teams, the overall benchmarks on speed, average weight, bench presses, etc. would be skewed. Benchmarking with the right set of peers (current or aspiring) is half the battle.

As noted, we analyzed the data further by looking for these differences based on industry type, type of operation, primary customer, size and strategy. Highlights of these analyses are provided below.

Key Measures by Industry Segment

Table 7 presents the three most popular measures employed for each industry segment. As a further aid, we have also included specific benchmarks and best practice values for each measure where there were enough responses to provide a statistically significant value.

Of course, this doesn’t answer a critical question: are some industries more likely to use some measures than others? Statistically significant

...(W)e believe... more companies... will begin to see the value in the Perfect Order Index and make more extensive use of it.

Table 7. Key Measures Used by Industry

Industry	Measure Used	Benchmark	Best Practice Range
MFG/DIST—General	Pieces shipped per person hour	190 Pieces	800-900 Pieces
	On-time shipments	97%	99-100%
	Order picking accuracy (% by order)	99%	100%
MFG/DIST—Consumer products	Pieces shipped per person hour	175 Pieces	421-1,600 Pieces
	Inventory count accuracy (% by units)	99%	100%
	On-time shipments	97%	100%
MFG/DIST—High technology	Inventory count accuracy (% by units)	90%	100%
	Inventory shrinkage as a % of total inventory	1%	0%
	On-time shipments	NS	NS
MFG/DIST—Automotive	On-time shipments	98%	100%
	Inventory count accuracy (% by units)	99%	100%
	Fill rate—line	97%	98%
Utilities/government	On-time receipts	95%	98%
	On-time shipments	95%	99%
	Inventory shrinkage as a % of total inventory	1%	0%
Life Sciences—Pharmaceuticals	On-time receipts	97%	100%
	Fill rate—line	99%	100%
	Fill rate—order	97%	100%
Life Sciences—Medical devices	Fill rate—line	97%	100%
	Lines shipped per person hour	13 Lines	200 Lines
	Inventory count accuracy (% by units)	98%	100%
3rd party warehouse	Pieces shipped per person hour	121 Pieces	500-600 Pieces
	On-time shipments	99%	100%
	Inventory count accuracy (% by units)	99%	100%
Transportation Service Provider	% of orders sent damage free	98%	98%
	Inventory count accuracy (% by units)	99%	99%
	Order picking accuracy (% by order)	98%	98%

NS: not sufficient data to provide benchmark for MFG/DIST—Aerospace/ defense and Retail

Table 8. Differences in Key Measures Used by Industry

Measure	Most Used in Industry	Least used in Industry
Fill rate—order	Life Sciences—Pharmaceuticals	Mfg/dist—High Tech/A&D
Units picked per hour	Mfg/dist—A&D, Transportation Service Provider	Mfg/dist—High Tech
Inbound units unloaded & put away per person hour	Mfg/dist—A&D	Life Sciences—Medical Devices
Cases shipped per person/hour	Mfg/dist—High Tech/A&D, Transportation Services Provider	Life Sciences—Pharmaceuticals
Lines shipped per person hour	Utilities/Government	Mfg/dist—High Tech
Days of raw material on hand	Mfg/dist—A&D	Utilities/Government
Days of finished goods on hand	Transportation Service Providers	Life Sciences—Pharmaceutical
Backorders as % of total orders	Life Sciences—Pharmaceutical	Mfg/dist—Consumer Products
Order picking accuracy	Life Sciences—Pharmaceutical	Transportation Service Providers

differences in the usage of the measures and industry sectors are noted in Table 8. For instance, the research team found that the sector Life Sciences—Pharmaceuticals was more likely to use the measure “Fill rate—Order” compared to the other sectors. The sector least likely to use this measure was Mfg/dist—High Tech/Aerospace & Defense (A&D). Statistically significant was defined at the .05 level; this means that the possibility that this reported difference is the result of randomness is only 5%.

The findings suggest that certain industries such as Manufacturing/Distribution High Tech and Life Sciences—Pharmaceutical have very different objectives regarding inventory and order management. Where one is mostly small, broken case shipments with a focus on high volume of orders and on-time shipments, the other is more concerned with production-related issues such as raw material management and bulk or pallet shipments.

Measures by Position in the Supply Chain

Most firms are a part of multiple, complex supply chains, all of which can have competing requirements. One of the research team’s hypotheses was that a company’s position in the supply chain played a role in the measures they used. Analysis of the measures was done based on their position in the supply chain, which was determined by identifying the respondent’s primary customer. As suspected, we found that location does play a key role—with different “supply chain segments” placing different priorities on the measures they use.

The data was analyzed two ways. First, the most common measures used by location in the supply chain are noted in Table 9. Second, the data was analyzed to find statistically significant differences among the four different locations (Table 10).

There is considerable overlap in the measures used by respondents. Three out of four use “on-time shipments” and all four use “inventory count accuracy” as key measures.

Impact of Business Strategy on Measures

Does a firm’s strategy have an impact on the types of measures used? Shouldn’t those firms that say they are “cost leaders” have different measures than those that are “product/market innovators?” Table 11 presents the top measures used by business strategy.

The research team found that the measures a company uses is also dependent on their overall business strategy.

For example: a company employing a customer service strategy is far more likely to rank “on-time shipments” as the most important measure

Table 9. Measures Used Based on Location in the Supply Chain

My Primary Customer Is a(n):	Measure Used
Manufacturer	Inventory count accuracy (% by units)
	On-time shipments
	% of overtime hours
Distributor	On-time shipments
	Inventory count accuracy (% by units)
	% of overtime hours
Retailer	On-time shipments
	Inventory count accuracy (% by units)
	Order picking accuracy (% by order)
End User/Customer	On-time receipts
	% of overtime hours
	Inventory count accuracy (% by units)

Table 10. Statistically Significant Differences in Measures Used Based on Location in the Supply Chain

Measure	Most Used when Customer is a(n):	Least used when Customer is a(n):
Fill rate—line	Manufacturer	End customer
Fill rate—order	Manufacturer	Retail firm
Pallets shipped per person hour	End customer	Manufacturer
Distribution costs as % of sales	Manufacturer	Retail firm
Value added per employee	Manufacturer	End customer

Table 11. Differences in Measures Used Based on Business Strategy

Business Strategy	Measure Used
Cost Leadership	Inventory count accuracy (% by units)
	On-time shipments
	On-time receipts
Customer Service	On-time shipments
	On-time receipts
	% of overtime hours
Product/Service Innovation	Inventory count accuracy (% by units)
	On-time shipments
	% of orders shipped without errors
Mix—Be All Things to All People	Inventory count accuracy (% by units)
	On-time shipments
	Order picking accuracy (% by order)

Table 12. Statistically Significant Differences in Measures Used Based on Business Strategy

Measure	Most Used With Strategy	Least Used With Strategy
Warehouse Damage	Product/Market Innovation	Cost Leadership
Fill Rate—Order	Cost Leadership	Product/Market Innovation
Shop Floor/Direct Labor	Cost Leadership	Product/Market Innovation
Days of Raw Material on hand	Product/Market Innovation	Cost Leadership
Annual work force turnover	Cost Leadership	Customer Service

used. This is not a surprise since customer service-focused firms tend to be externally driven and on-time shipments is a key driver to customer satisfaction.

What is surprising is that the number one measure used across the remaining three business strategies is an internal measure of inventory count accuracy. And what is more surprising—no financial measures made the top three list for companies focused on cost leadership.

Of the measures used, which are statistically significantly? In other words, based on the firms' strategy, which measure(s) are mostly likely or

least likely to be used by the company? These results are shown in Table 12.

Type of Work Performed in the Facility

As would be expected, the most significant differences in the measures used can be found by understanding the type of work completed at the DC. These choices were full or partial pallet and full or broken case picking.

Impact of Culture

To determine the impact that performance measurement had on corporate culture within the

The findings suggest that certain industries...have very different objectives regarding inventory and order management.

Having a difference in “listens to suggestions” and “acts on suggestions” is usually an indicator that employees may begin to get demoralized with making suggestions that are not seen as valued....

organization, we asked a series of questions designed to capture individual and management opinion regarding the use of measures and performance reporting. Questions ranged from senior management interest in measurement, through compensation, communication of strategy, and the level to which improvement ideas are implemented.

Senior Management Interest

One of the questions asked was related to any change in the level of interest in measures on the part of senior management. Respondents indicated that 66% of their company’s senior management exhibited an increase in attention to measures as opposed to only 3% showing a decreased interest.

Table 13. Interest in Measures by Senior Management during 2004

Decreasing	Staying the Same	Increasing
3.3%	30.7%	66.0%

Conveying Strategic Direction

The survey also asked respondents to indicate the effectiveness of the company’s ability to convey strategic direction effectively to them. Communicating strategic direction with staff is a critical element because at the heart of any measurement program is the fact that employees understand where the company is headed. Table 14 addresses four key questions regarding communication of strategic direction.

On the positive side, 75% of respondents felt that they understood where the company is headed and 89% felt they understood their role in the company. We see this is an encouraging sign for distribution professionals—one which no doubt is related to an increased awareness of the potential benefits of good supply chain management on the part of many executives. We also believe that it is related to an increased awareness among staff of the operational and financial drivers that management sees as important with respect to corporate objectives and strategy for logistics professionals.

On the negative side, only 55% of respondents felt that management communicated effectively. The research team finds these results to be somewhat inconsistent. How can a company not communicate effectively, yet respondents understand where the company is headed and how they fit in? Are the respondents simply making assumptions about what is important?

This disconnect may be an indication of the reasons why the DC personnel completing the survey tended to not have a balanced set of measures. Specifically, it may be an indicator that top management is not being clear about financial objectives for their companies. Case in point: How can a company be a low-cost leader and not focus on financially-oriented measures? One would think if management and employees understood the direction of the company to be the low-cost leader, there would be more financial/cost-focused measures being used.

Implementing Improvement Suggestions

Another indicator of a good measurement culture is the extent to which a company listens and acts on improvement suggestions from employees. The survey indicates that over 88% of respondents *agree* or *strongly agree* that management listens to their improvement suggestions for making the company better. While this is a great indicator, it is important to note that less than 75% *strongly agree* or *agree* that management acts on their improvement suggestions.

Having a difference in “listens to suggestions” and “acts on suggestions” is usually an indicator that employees may begin to get demoralized with making suggestions that are not seen as valued and as such their efforts to make key improvements may decline over time.

In addition, only 60% of respondents believe that they are financially rewarded for their efforts in improvement. This lack of “reward” by the company—either in the company’s lack of actions on the suggestion or in their lack of financial reward—may contribute to an overall waning in performance improvements over time if not addressed.

Perhaps management does not believe that the suggestion is in line with their goals or business plans. Does this underline the earlier question of adequate communication?

Compensation

The last aspect of culture the research team wanted to explore was the extent to which compensation was being tied to performance measures. Specifically, the team wanted to see how frequently companies were using bonuses based on the employee level and whether or not such bonuses were deemed *important* (Table 16).

Of interest is the fact that management-level employees were most frequently cited as having

Table 14. Conveying Strategic Direction

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Management communicates effectively	12.4%	42.9%	28.3%	11.5%	4.9%
Corporate values are understood	22.6%	39.4%	25.2%	9.7%	3.1%
Understand where company is headed	27.8%	47.6%	17.6%	5.3%	1.8%
Understand my role in company	37.9%	51.1%	7.5%	3.1%	0.4%

Table 15. Implementation of Improvement Suggestions

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Management listens to suggestions	35.2%	52.9%	8.4%	1.8%	1.8%
Management acts on suggestions	22.6%	51.8%	19.9%	4.4%	1.3%

Table 16. Level of Compensation Tied to Performance Measures

Who	% Used	% Very Important	% Important
Corporate Officer	45%	22%	11%
Director	53%	33%	12%
Manager	60%	41%	15%
Staff Specialist	50%	19%	15%
Shop Floor/Direct Labor	52%	25%	11%
Temp Labor	35%	6%	5%

bonus compensation tied to performance measures. Management was cited as having a higher percentage of usage for measurement-based bonuses than Corporate Officers and Directors. This does not mean that Corporate Officers and Directors are not receiving bonuses as a key part of their compensation—but rather that Corporate Officers and Directors are less likely to have their bonuses tied to specific performance measures.

The research team hypothesizes this is the result of two key factors. First, most of the measurements actually used today by companies as indicated in the survey are more tactical in nature. Second many companies subscribe to a “line of sight” philosophy and if measures are tied to an employee’s bonus it is probably easier to hold managers and direct labor associates the most accountable to specific performance measures because they have the greatest degree of “line of sight” to achieve a particular performance target for a given measure.

Acknowledgments

We would like to thank several individuals for their support of the research project. From WERC, we would like to thank Bob Shaunnessey for his support of the project. Both Michael Moss and Rita Coleman were invaluable for their edits and

work to send the e-blast to the WERC membership. Peter Bradley and Mitch MacDonald played a key role at *DC Velocity*. Steve Murray with Supply Chain Visions helped in analyzing the data. Finally, Eugene Pierce and Chad Ingersoll at Georgia Southern University helped in the construction and maintenance of the survey web site, as well as the initial data analysis. To all we give our thanks. ■

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Of interest is the fact that management-level employees were most frequently cited as having bonus compensation tied to performance measures.

< Pg. 1, "Call to Action"

On the cultural front—it is very positive that senior management is beginning to understand the value of measurements within their organizations, and the impact of high performance with regards to these measures. They are beginning to compensate employees for their achievements with respect to measures. Our third call to action is that management actively work to close the gap between listening to employee's improvement suggestions and acting on those suggestions. While it is not necessary to financially reward employees for their contributions—it is critical that management recognize employees for their involvement in helping the company achieve the desired levels of performance through their efforts to make improvements.

Lastly, the research team continues to see the profession focusing on operational and tactical measures versus on process type measures that span various departmental silos. For example, the focus on "on-time shipments" versus "on-time deliveries" or the Perfect Order Index supports the fact that what is being measured is often what is in the span of control/what is easy to measure. We see that in many cases the measures used may be useful to a specific organization or department, but they do not seem to be tied to any overall corporate goals or objectives. The obvious danger here is that while the specific unit may feel good about its own performance, the rest of the company may be suffering as a result. Our last call to action is for DC professionals to begin to stretch their thinking and broaden their perspective to look at measures that are more strategic/cross functional in nature and support the "voice of the customer" rather than their internal capabilities. ■



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