*June 2009*

# AMR Research Benchmarks the Benchmarkers

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"How does my supply chain stack up against that of my peers?" This question keeps chief supply chain officers up at night. What should cause them total insomnia is the benchmark data they use to make major decisions, which may not be clean, comparable, or relevant. This Report helps companies understand where to get benchmark data, the capabilities and pitfalls of benchmarking providers, and how to sort through the options.

*What are my peer's logistics costs? How do my inventory turns compare?* For most chief supply chain officers (CSOs), the answers to these questions are unclear in the best of times, but they become even less so after benchmarking activities. In the words of one executive, "We would like to compare apples with apples, but sometimes we just know it's a basket of fruit."

Supply chain benchmark data used to make major decisions is often not clean, comparable, or even relevant. In this article, AMR Research will help you understand where to get benchmark data, the capabilities and pitfalls of benchmarking providers, and how to sort through the options. To prepare for this research, we interviewed 14 providers of benchmark data and conducted follow-up calls with references to validate our findings. We focused on service providers of cross-industry supply chain benchmark data that cover the central SCOR model functions: source, plan, make, and deliver.

Our interpretation of the findings is based on AMR Research's prior benchmarking experience with 70 supply chains, the development of the supply chain hierarchy of metrics, and early involvement in designing the SCOR model with the Supply Chain Council.

This study, the second study in a series, follows the Report, "Benchmark Your Supply Chain: Seven Factors for Success," which focused on the benchmark governance and process required to clarify and achieve the benchmark goal.

## Who has the goods?

Quantitative supply chain benchmark data is like gold to supply chain executives. It helps them focus and prioritize their efforts and supports project funding. While many benchmark providers claim to have the answer, we find that only a handful of companies have end-to-end supply chain data for manufacturers and retailers. We find even fewer have quality data that CSOs can use to drive supply chain programs.

Table 1 summarizes service provider capabilities in benchmarking. These capabilities vary both in depth and breadth, with measurement from 20 to hundreds of metrics that cover the SCOR model functions.

**Table 1:** Providers of supply chain benchmark data

| Service Provider | Geographies† | | | | Basis for Metric Definition | New Datasets Per Year | Primary Industries | Cost | Data Quality |
|---|---|---|---|---|---|---|---|---|---|
| | NA | EMEA | APAC | LA | | | | | |
| APQC | 75% | 15% | 10% | ††† | OSBC | 200-300 | CP, retail, industrial, high tech | N/C—$$ | * |
| Benchmarking Success and Logistics Bureau | | | 100% | | SCOR compliant | 40-60 | CP, industrial, high tech | $$ | *** |
| iCognitive | | 30% | 70% | | SCOR | 1,000 in 2008 | Chemical/process, high tech, CP, industrial, life sciences | $ | ** |
| The Performance Management Group (PMG) | 60% | 25% | 10% | 5% | SCOR | 100-125 | CP, life sciences, high tech, industrial, chemical/process | $$ - $$$ | *** |
| Supply Chain Council | 70% | 20% | 10% | ††† | SCOR | Less than 100 | CP, life sciences, high tech, industrial, chemical/process, retail | N/C for members | * |
| Tompkins—Supply Chain Consortium | 100% | †† | †† | †† | Custom | 180-220 | CP, life sciences, high tech, industrial, retail | N/C—$$ | ** |

*Source: AMR Research, 2009*

**Notes:**
† Geography is shown as the company headquarter for data entry, not the span of its supply chain.
†† Moving into other geographies in 2009.
††† Included in NA.

SCOR: Supply-Chain Operations Reference Model, as defined by the Supply Chain Council.
OSBC: Open Standards Benchmarking Collaborative research framework, as defined by APQC.

**Cost Key:**
N/C = No cost, but participant is required to enter data to receive data
$ = Less than $5000 pa
$$ = $5000 to $25,000 pa
$$$ = More than $25,000 pa

**Data Quality Key:**
The * - *** ranking is based on four factors: level of support, supply chain and benchmarking expertise, metrics and scope quality, and data cleansing and validation.

- **APQC**—Research is based on APQC's Open Standards Benchmark Collaborative framework. APQC is a non-profit organization focused on benchmarking and process improvement.

- **Benchmarking Success and Logistics Bureau**—Based in Australia, Benchmarking Success and Logistics Bureau has benchmarked over 800 companies in Asia-Pacific. It also provides business improvement peer groups.

- **iCognitive**—iCognitive benchmarks annually on behalf of the Supply Chain Council Southeast Asia Chapter. It has offices in Singapore and France.

- **The Performance Management Group (PMG)**—A subsidiary of the consulting firm PRTM, PMG formed in 1998 specifically for benchmarking.

- **Supply Chain Council**—The SCC is in alliance with APQC for benchmarking. APQC manages the SCORMark portal for data entry, data cleansing, and reporting.

- **Tompkins—Supply Chain Consortium**—The consortium was founded in 2004, facilitated by Tompkins (a supply chain consulting firm) under leadership of an advisory board. Its database is 20% metrics and 80% best practices.

Niche data with focused information is also important to the CSO. Below is a small sample of these providers that focus on a specific function or industry:

| Provider | Focus |
|---|---|
| **Ariba** | Ariba's Benchmark program provides its clients with comparative data biannually on sourcing and contract metrics, spend analytics benchmarks, and procurement efficiency. This program also tracks the use of Ariba tools (adoption, spend throughput, commodities sourced) and provides a common taxonomy for clients in sourcing, peer to peer (P2P), supplier network, contract management, spend visibility, and organization activities. |
| **CAPS Research** | CAPS Research serves the supply management organization, focusing on procurement- and sourcing-related efficiencies and cost. The company provides high-quality, cross-industry benchmark comparisons, functional and activity-based benchmarking reports, various industry-specific benchmark reports, and a market basket approach to price benchmarking of MRO goods, office products, and print services |
| **Chainalytics** | Chainalytics provides analytical supply chain consulting and freight-rate benchmarks. Benchmark models are based on actual shipment data, updated twice a year. Members receive detailed lane-by-lane analysis, rate estimators, and the opportunity to participate in collaborative lane matching with other members. Chainalytics' benchmarks also support network design and inbound landed cost analyses. Its scope currently covers LTL, truckload, and intermodal in North America, as well as global ocean container rates. Its service is expanding to other modes and geographies. |
| **Global Commerce Initiative (GCI)** | Using GlobalScorecard.net, retailers and consumer products companies worldwide update 13 required business metrics as part of the annual compliance survey. In 2008, 3,637 companies submitted this data. Two optional sets of measures are also available: implementation of GS1 global standards and a deeper set of business metrics. |
| **Hackett Group** | The Hackett Group specializes in benchmark data to help clients understand their efficiency and effectiveness in finance, SG&A, IT, HR, and procurement, with strength in indirect spend. It uses a proprietary taxonomy and does activity-based cost analysis in data collection. |
| **IBM** | In partnership with APQC, IBM's benchmark data is based on APQC's process classification framework and data, then expanded to an additional level of detail and stored in an IBM database. This data is for the IBM consulting teams to identify best practices and benchmark their clients' performance against peers. |
| **PricewaterhouseCoopers (PwC)** | Primarily to support consulting engagements but available to outside subscribers for a fee, PwC's Global Best Practices (GBP) group collects quantitative data and reports on metrics of cost, quality, and time. This includes supply chain metrics, but is currently most populated in areas of finance, IT, and internal audit. |
| **WAM Systems** | Specializing in the chemical and process industries, WAM Systems collects and provides about 10 supply chain metrics as part of its business process benchmarking services. WAM Systems' clients rate this service easy to use, with high data quality and expert supply chain knowledge |

*Source: AMR Research, 2009*

## How to select the provider

Each vendor has different capabilities regarding its metrics definition, validation and cleansing processes, the number of support staff to provide assistance, and level of supply chain expertise. Before embarking on a quantitative benchmarking study, you must understand what you are getting into, the costs involved, the effort required on your part to collect and input the data, and what you will get as deliverables.

In the consideration of a benchmarking service, consider the following elements:

### Expertise

Check the expertise of each potential benchmark provider in two categories. The first category is training and readiness. The provider should train your team and prepare you for the benchmark, particularly regarding data definitions, accuracy, and scope. The second category is supply chain knowledge. The provider needs more than a basic level of supply chain knowledge to validate the data, identify data outliers, fix the data, and help identify a comparable peer group and data set for reporting purposes. We found a wide spectrum of expertise among the benchmark providers, particularly in supply chain knowledge. What is also important to question is the ratio of support people to the number of benchmarks they conduct each year. This will give you a sense of how much bandwidth they have for validation and to ensure quality of the data.

### Scoping and peer group definition

Get a clear indication of the provider's level of guidance and its requirements in terms of scope and peer group definition. The scope is a critical component in choosing the right peer group, and we found vast differences in how the benchmark providers view the scope for data collection and analysis. Does the provider guide you on whether you should collect and enter data at the total company/division level versus for a specific supply chain, or whether it will be for your North American versus Asia-Pacific supply chains? Do they distinguish between make-to-stock and make-to-order supply chains? When choosing companies to include in your peer group, will you be able to ensure that each of them entered data for the same scope you did?

For example, PMG decides on the geography of a supply chain based on location of company head-

quarters, while most of the other providers allow each company to decide for itself. And APQC does not differentiate make-to-stock versus make-to-order processes, but other providers do. The more guidance provided, the better the ultimate results will be.

### Deliverables

What deliverables do you need for your program, and how usable are the ones offered by the benchmark service provider? To make this decision, ask for samples of reports or online options and understand the flexibility in slicing and dicing the data and selecting the peer group for comparison. When looking at deliverables, also look into depth and breadth of data for your selected peer groups.

### Data scope

Ask the provider how many companies they benchmark annually by industry, how long they keep the data, and the depth of the metrics collected. For example, the perfect order has many definitions and sub-components (see "Data scope and quality—in focus" below for further explanation).

### Data quality

Because data validation is one of the most critical elements, you should ask the provider what levels of validation it provides. All the providers offer some basic automated checks and balances, but this is not enough to ensure high-quality, comparable data. Good benchmark data requires additional levels of validation and harmonization, typically by people with supply chain expertise who are manually and proactively reviewing the data for anomalies (see "Data scope and quality—in focus" for additional discussion).

### Other services

While some providers focus solely on benchmarking, others use benchmarking as a part of a larger program, which can range from ad hoc benchmark studies and peer networking to full consulting services. Consider the total package. Some reference companies we interviewed felt they get more out of the ad hoc surveys and networking opportunities that some providers offer than the annual data they receive. The consulting firms may offer benchmarking as a no-charge value-add to build a relationship that leads to larger projects.

## Other relationships

Ask the provider if some of their data is gathered based on relationships with other providers. While this may broaden the data set, it may also compromise the validity and accuracy when merging data sets with potentially different data definitions.

## Renewal rate

If the business model of the provider is to encourage clients to subscribe and enter data annually, ask about their renewal rate. A word of caution, though—we heard this a few times: "To remain a member and get annual data, we have to submit data annually, so we go through the motions with as little effort as possible."

## Total cost of benchmarking

While lower cost options are appealing, remember that the total cost of a benchmark is about more than money. Understand exactly what each provider offers in data quality, scope, and peer group options. This will help you figure out what provider will suite your specific benchmarking need, and sometimes going for the lower cost option recognizing the potential quality or scope issues, but using the data merely for a directional view of your peers, is sufficient. If you understand the strengths and weaknesses of each provider, you can determine what data is most relevant to your decision-making process.

One final option to consider is a combination of providers. A company we spoke with said, "We always use a combination of benchmark data providers. It allows us to double-check the data and broadens the services available to us."

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## Data scope and quality—in focus

Food quality problems result in massive peanut product or pet food recalls. In the same way, benchmark data quality problems can result in poor supply chain decisions. Data quality is not just about how the data is cleansed, but also about the comparability of the data. Who is in your peer group, and is the scope of the data they entered similar to yours? Are you looking at like supply chains? What geographies are included? And how well does your provider understand and manage this? Be aware of two aspects that impact the comparability of the data:

- **Data cleansing**—At its most basic level, clean data means that all companies calculated the data the same way. To get that, the calculations need to be clearly defined, everyone needs to understand them, and the data must be available to be collected. All of this requires guidance on the part of the benchmark provider. Take the example of the perfect order metric, defined as an order that's complete, accurate, in perfect condition, and on time to the original commitment date. Do late shipments caused by lack of customer readiness count as late? How should a company count its backorders? Are these taken out? Because the possibilities are endless, a good benchmark provider offers proactive guidance to ensure consistent contextualization. Where data is unavailable, they must offer estimation techniques and advice on how to apply the instructions in a consistent way.

- **Scoping**—Make sure you are getting comparable scope. Did everyone you are comparing to benchmark the same scope? Are some measuring at the total company level while others are measuring one division, and still others are measuring one supply chain? Are you comparing your make-to-order data against someone else's make-to-stock data? Is one company's data aggregated worldwide, while another's is just its North American customers?

The service providers we interviewed conduct different levels of data validation and cleansing. All of them provide a basic validation, often automated, using simple rules and thresholds. Some provide deeper analysis, either through some degree of automated cross-checking or by a person reviewing the data for reasonableness.

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## How to get the most out of your benchmark

Before embarking on a benchmarking project with any provider, consider four areas to keep your benchmark on track:

### Plan

It takes time. Understanding the data definitions and collecting and checking the data prior to entry are very time consuming, particularly if done as a one-off exercise. Companies that perform a benchmark study annually and have automated their data collection find the process easier. One leading retailer gives this annual exercise to new supply chain hires from business school, "Without these resources we would never be able to benchmark annually, and it is a great way for the new MBAs to meet people and get to know the business." One caution to this approach: Make sure you have adequate training, documentation, and oversight to avoid the inconsistency and errors that can arise from using new people each year.

### Look for apples to apples

To avoid a fruit basket of comparative data, make sure the people who are collecting the data—often different than those who selected the provider—understand the provider's data definitions thoroughly. It's worth the time. In the words of one of the references we interviewed, "We have to invest the time in understanding how the metric is created, or our answer will be wrong. Garbage in is garbage out."

### Verify scope

In some services, companies will enter data for select functions rather than a full set of end-to-end metrics. In fact, no provider we interviewed insists on collecting a full set of end-to-end supply chain data. This is problematic because metrics have interdependencies that affect how you view the comparative data. For example, companies make trade-offs between cost and service. Forecast error and supplier performance can have a direct impact on inventory levels. Unless a true end-to-end supply chain benchmark is done for the full scope of the benchmark, these interdependencies will be unclear and correlations cannot be made from the data.

Find out if you are comparing to full company data-sets or not in order to make valid business decisions. According to a consumer products company executive, "The upside is we can select what data we collect and enter. The downside is we know we are getting back skewed data sets because of this."

### Define frequency

Decide how frequently you need to benchmark. To diligently and accurately collect the data for a benchmark is time consuming. Companies do report that it becomes easier after the first time, particularly once they have developed a repeatable process. We found benchmarking the metrics most useful to support a major transformation or at key milestones.

## Conclusion

Supply chain executives make important decisions based on peer group benchmark data. Given the significance of the data, it is important to understand the differences in scope and quality of data available. Make a selection with your eyes wide open, and consider using a combination of data from different providers.