

HIDDEN SOURCES OF BETTER SUPPLY-CHAIN PERFORMANCE

High-level benchmarks often obscure paths to operations improvements. New data and metrics that tap underlying performance dynamics offer better visibility.

by Per-Magnus Karlsson, Shruti Lal, and Daniel Rexhausen

Consumers want more variety, convenience, and service, increasing pressure on supply-chain executives to generate savings that fund the added costs of complexity and enhanced customer demands. We find that many companies are taking similar actions to improve productivity, with the result a convergence in supply-chain performance, by commonly used benchmarks. Put simply, companies seem to have hit the wall.

Appearances can be deceiving, however. Our work with global consumer-products players across several hundred supply-chain projects shows that when companies mine deeper veins of operational data to create more precise metrics, new paths to improvements appear. Exhibit 1 shows an 11 percent difference between median and top-quartile companies when commonly used cost benchmarks are used. Some of the difference arises from structural factors, such as costs attributable to product variations and demand volatility, and is therefore outside companies' control. A closer analysis, however—one that filters out these structural differences and uses more granular data to quantify second-level cost components, such

as labor staff or transport charges per pallet—shows a much greater potential for improvement. We found similar opportunities for supply-chain services when broad benchmarks, such as case fill rates (indicating order-fulfillment levels), are broken down with more granular data and key performance indicators, such as forecast accuracy.

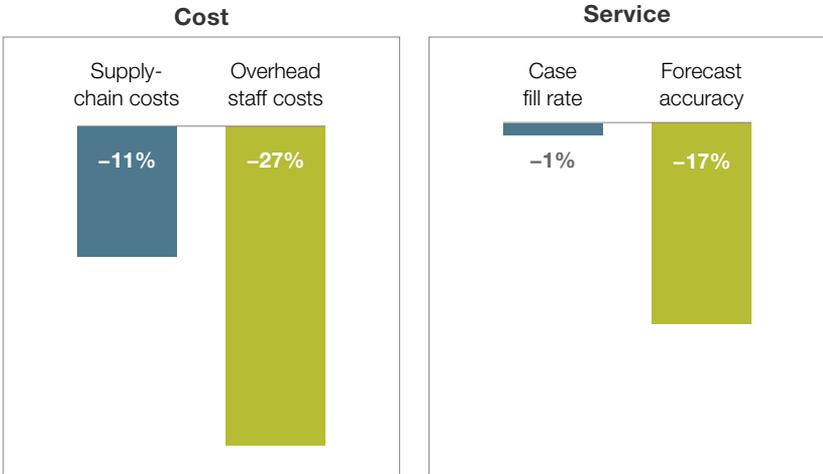
How to capture the potential gains from more precise data and a better analysis of the underlying drivers? Exhibit 2 digs deeper into one application involving service improvements. High levels of demand volatility weigh on how well a consumer-packaged-goods company fulfills customer orders. Poor management of order flow leads either to items being out of stock or to costly “safety stock” investments. When we looked at a set of companies with relatively low volatility levels (less than 40 percent of total demand), we found that there was still a significant gap in service levels between top and bottom quartiles, indicating that some of the performance differences stem from how well a company manages the variation. Two benchmarks drawn from a deeper cut of operations data showed that to be the case: one a measure of the accuracy of demand forecasts

Exhibit 1

Commonly used benchmarks indicate a convergence in supply-chain performance, but more granular metrics such as overhead staff costs and forecast accuracy reveal room to improve.

Gap between median and top-quartile companies

■ Commonly used benchmarks ■ Underlying benchmark driver¹

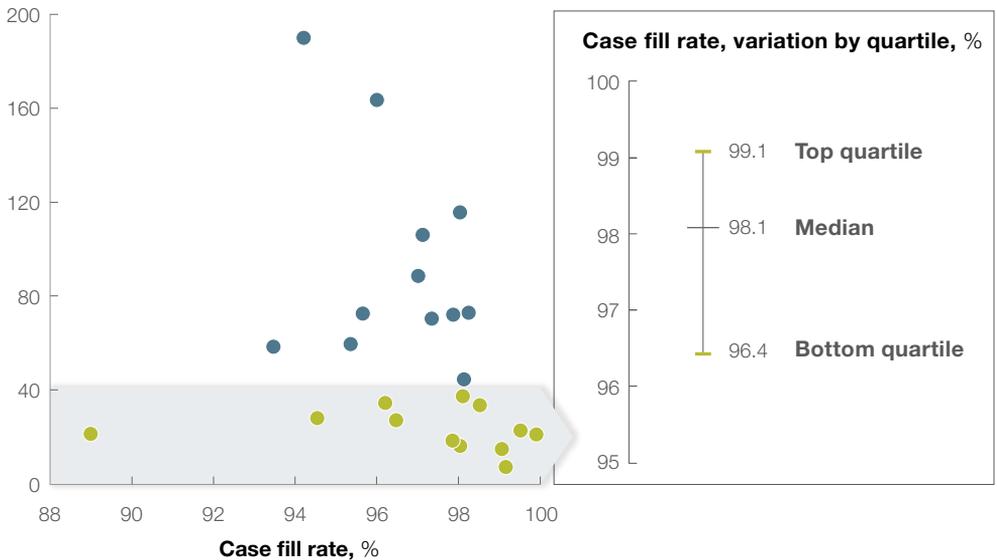


¹ Overhead staff costs and forecast accuracy are examples of the underlying drivers companies can employ.

Exhibit 2

Even among companies with lower levels of volatility, the gap between top- and bottom-quartile performers is significant.

Demand volatility, %



and the other a measure of the flexibility of production processes. We found that more accurate forecasts of sales volatility resulting from promotional campaigns (levers under management control) accounted for 70 percent of the service differences. More agile production processes allowing companies to adjust rapidly to volatile SKUs explained the remainder of the performance gap.

Three principles should guide companies' actions as executives seek to sharpen their competitive advantage through better data:

- *See costs as only one lever.* The bigger picture also includes service levels, inventory, product quality, productivity, and flexibility.
- *Make apples-to-apples comparisons.* Benchmarking the performance of a warehouse in Latin America that receives large and small orders with a European facility delivering mostly big ones (even for the same product) will miss differences in labor intensity and operational complexity.

- *Dig deeper.* High-level metrics, while helpful, can obscure deeper insights that emerge from scrutinizing individual steps in the value chain. More granularity, granted, may require more alignment among top management, supply-chain leaders, and plant managers on the relevant variables and how to measure them, but the financial gains will be worth the effort. 

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 For the complete findings, see "My supply chain is better than yours—or is it?," on [McKinsey.com](https://www.mckinsey.com).

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