New Models Require New Metrics

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For companies, the creation and pursuit of real-time granular data is critical -- they need it to guide their business behaviors and understand the true nature of their market.

The last 10 years have seen significant changes in business models of the global enterprises. We have seen a "flight to big," the ever-larger, more powerful, and ubiquitous enterprise. In 2002, in spite of a down economy, our largest public firms still grew, with Wal-Mart growing at the rate of a Fortune 100 every year! And we must include other organizations of dominating purchasing power such as governments, like the Department of Defense's $400 billion spend. In addition, third-party enterprises, such as contract manufacturing and logistics, represent some of the fastest growing firms in the world.[1] These mega-enterprises are driving a restructuring of the value chain on a global basis.

This "flight to big" does not mean bloated. Their size has not kept them from behaving more competitively, battling with precision every point of market share, every point of ground, and every point of margin.

These mega-firms have embraced similar strategies to drive and thrive at their size. These are:

- Performance pursuit – on-time, fully armed, within the appropriately defined financial boundaries of the enterprise.
- Virtual supply chain management to leverage the operational capabilities of their trading partners – the virtual business model.
- Pervasive, obsessive quest for pinpoint-accurate and real-time data.

They set the pace and experiment with business innovation, which is instructive to their smaller brethren, who look for lighthouse successes before attempting initiatives. The problem with the mega-enterprise, though, for the rest of the market (and often for the consumer), is the sheer power they wield. This creates an imbalance in the market on the flow of information and money, access to end customers, and so on.

This power includes attempts to dominate policy process, performance, and enablers (3PEs) in their virtual supply chain network. They work policy and compliance issues in their chain to create a seamless execution model – for them. These then become competing supply chains. These supply chain networks need a way to look at the community's success, as well as the individual firms' share of that success.

Supply chain discussions around the 3PE's have not modernized much, relying on the same basic premises, using the same terms and metrics from the 1970s. Although many firms have put their toe in the water with new technologies, they have not assessed the performance metrics that can actually drive and measure a robust and responsive supply chain into being. To date, most policy decisions have been a bit immature.

Push product to the retailer and hope for sizzle before events overtake our product positioning and the retailer's blanket markdowns lose our profits. Or, on the manufacturing side, push the problem to the supplier, if you can. Figure 1 shows the state of affairs in these chains – pushing capital expense through to the suppliers, whenever possible. Certain power players in the chain have been able to reduce inventory or rely on contract manufacturers and distributors to hold inventories to respond to upside and downside in market demand.

Strategies today such as VMI, build-to-stock, or even maintaining idle or flex capacity for so-called postponement/agile/build-to-order models inherently add cost to the chain. These strategies are put in place due to the lack of market or supply intelligence and also as a convenience to trading partners to make the supply chain more responsive. Frequently, firms do not truly understand the costs, drivers, and events that actually make the supply chain hum – or creak. Nor whether they are actually gaining or losing due to these approaches. They are based on linear views, rather than a supply chain or network view. In this linear view, some progress has been made (again Figure 1), but they continue to hold costs and losses. In this article, we will explore that in this new reality in the supply chain, there is a need for a new way to measure in the virtual environment.

Why New Metrics

If we are competing chains, a community of players assembled to create advantage, each player on that team has a role to play. If the team wins, the players win, but they are also looking for their share of the action. Metrics in the supply chain need to look at whether the assembled team has won and what is my share of the winnings. We didn't see anything that addressed the network performance and the individual position-share or burden of overall network success.

In addition, many performance metrics in the supply chain have fallen into disuse – they are hard to collect and main-

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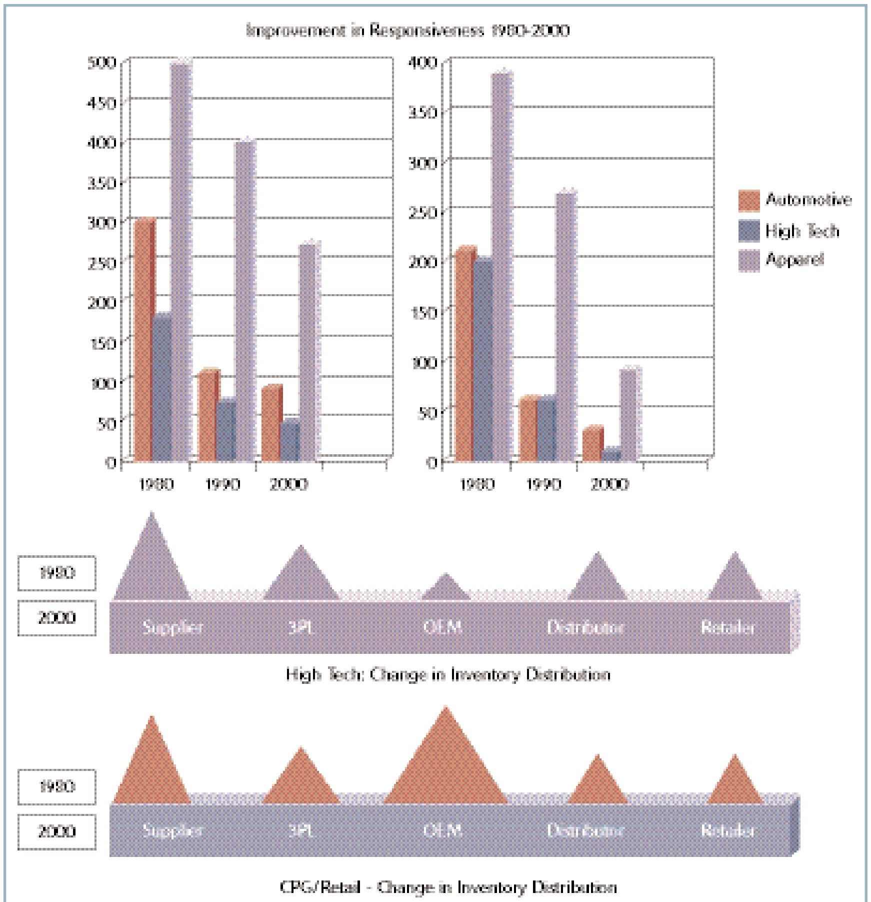

Figure 1 caption

tain. Benchmarking, for example, requires peer group membership and intense data collections that are based on "vanilla-ization" of the process in the order to compare, which is counter-intuitive to successful business strategies, creating differentiation. And most significantly, the mega-companies do not consider others as peers. They won't engage in benchmarking, though others would like to know anything and everything about these and other successful firms. In general there is magnetism to learn about best practices that lead to performance advantage.

With powerful OEMs and retailers, downstream players are being asked to take on many added burdens – holding inventory, capacity, and a minutia of compliance activities – labeling packaging, payment terms, etc. Downstream supply chain members, who are hardly in a position to object, are frequently left holding the bag.

In a sense, that might be okay if you are getting compensated in some material way, such as increased market share, margins, shelf-space, exclusivity, or sales.

The investment distribution has changed over the last few years in the chain as the problem has been pushed downstream (see Figure 1), indicating that some firms might not be compensated. And as we know, the cost of the chain might not be altered, with the end consumer fundamentally paying the same price.

We also wanted to create something easy to understand and apply – immediately – by companies. And use to improve, focusing on altering chain and the firm's position and share in it. Thus HBQ‰. We now track several major industries using this technique.

The Performance View

So in this community view, which is the whole chain, only a few things ultimately count. Can the chain respond to markets? Are we and me making money? And can we continue to improve on our overall performance? There are many challenges in coming to a methodology that can be understood and easily applied.

The goal is to point to performance and allow firms to make informed decision about their partnerships and whether they are left holding the bag or having a value-adding relationship. Our method? Public companies generally report things that can be compared. Plus, firms do know the bottom-line dollar value of sales they get from each customer, so we created this simple but revealing approach to SC Performance in this virtual world. This article does not have enough real estate to review all the performance quotients, but you will clearly get the point after reviewing the concept. They are:

- **HBQ*a* –** Agility. Agility for the ultimate customer is in cumulative response times in an industry product, etc., not you alone.
- **HBQ*s* –** Share. How much business do I get from my customers based on how much burden they place upon me. Firms have a great deal of problems culling out an ABC view by customer. Most can't truly account, but through HBQ approaches they can understand the burden and return for that burden whether capacity or inventory.
- **HBQ*c* –** Cash. Again, firms may not be able to put an exact finger on profitability by customer, although there are excellent systems that can be acquired to create a view of this, but they do know their terms and conditions and when they get paid. So we use Days sales outstanding by trading partner. This burden varies by trading partner, so again you can easily determine whether you are fairly part of a community or holding the bag for others.
- **HBQ*i*** – Inventory or Assets. Here is where firms place the most attention. We can see it pile up, or down, and it is a terrific symbol of success or failure at a number of things – sales, deftness, information quality, physical distribu-

tion processes, and trading partner collaboration success. It also points to exposure or risk in the relationship.

Lets walk through HBQi and see how you can understand and use this approach. Figure 2 shows two firms in action with the same suppliers. From a lean perspective, the retailer X chain is a bit leaner than Y. Obviously there are practices and policies behind these pictures that make a significant difference in this leanness. Suppliers A and B serve the same customers X and Y, but they are able to perform better in the X chain. We found that contrary to many opinions, a well-run retailer or OEM[2] tended to provide a slightly better demand picture to their suppliers. And that community may have a margin and price advantage due to reduced carrying costs in the chain. Of course, that is not the whole story.

Now lets understand the burden or individual assessment. In figure 2 we can also see how one firm can use HBQ to see their burden *vis-à-vis* their customer. Tier 1 suppliers appear to be holding the bag. In general, in just about every industry ChainLink surveyed, suppliers felt they were – on inventory, price, payment terms, etc.[3]

The burden of inventory is clearly in Tier 1. However, a firm needs to also look at margin and share. What if, though I hold more inventory for Y, I gain more margin and sell more product through the channel. That may offset the burden felt. In addition, there is a conditioned reflex within substrata in industries. We see how tiers stack up. This can be useful to understand industry trends. For example, as the economy picks up and essential or critical components can go on allocation, inventory build-ups in chains or changes in lead-times and so on can be an early warning of what is to come.

HBQ can be used as a peer assessment technique. A firm can do a simple benchmark and see how they stack up in the tiers next to their complimentary suppliers or competitors. This is a critical self-assessment since it forces the firm to look within their own practices – why am I doing poorly *vis-à-vis* others in the chain. The tendency to blame retailers or OEMs, rather than looking to improve ones own firm, is pervasive. But not nearly true. Our HBQ techniques reveal that many firms can take control of their destinies. In figure 3, we need an example of just that.

How can Procter & Gamble, with the same retail challenges (selling to Wal-Mart, Target, etc.), achieve such better results? We see countless examples of this. So one of the aspects of doing HBQ for yourself is facing up to the somewhat obvious facts that you can change for the better. When we first started measuring industries, for example, we modeled major brand suppliers for the Big 5 retailers – Colgate, P&G, Gillette, etc. Gillette has reduced its DOS more than 50 percent in the last year. As well, we modeled the majors in high-tech; rather than blaming Dell, Seagate has reduced its inventory down to 22 days from a high of 80 days. And Seagate's aggressive plans bode well for even better performance.

So, beyond carrier costs, the firm's performance position can further be improved or eroded by its cash position, HBQc. As we layer on the cash, we

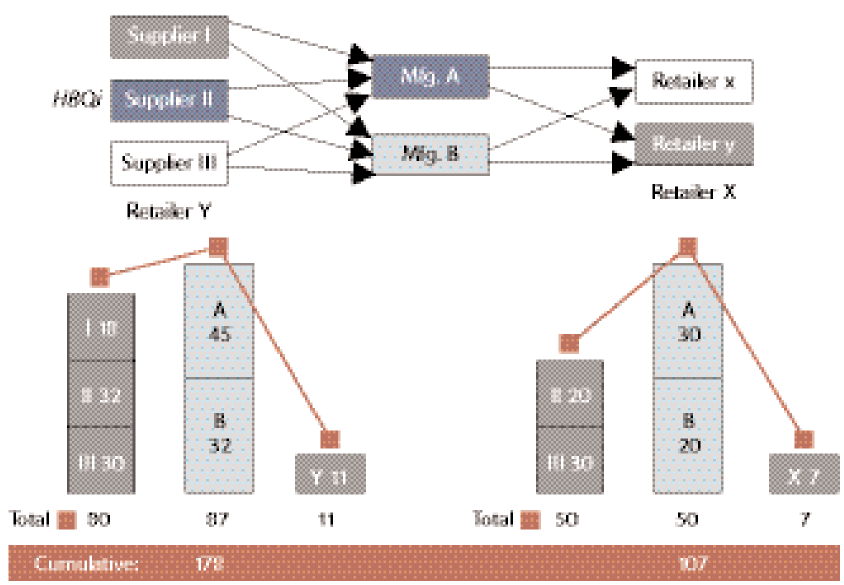

Figure 2 caption

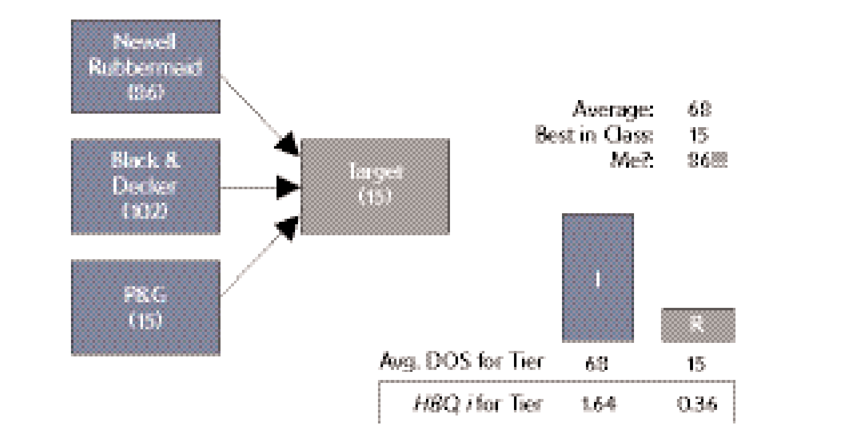

Figure 3 caption

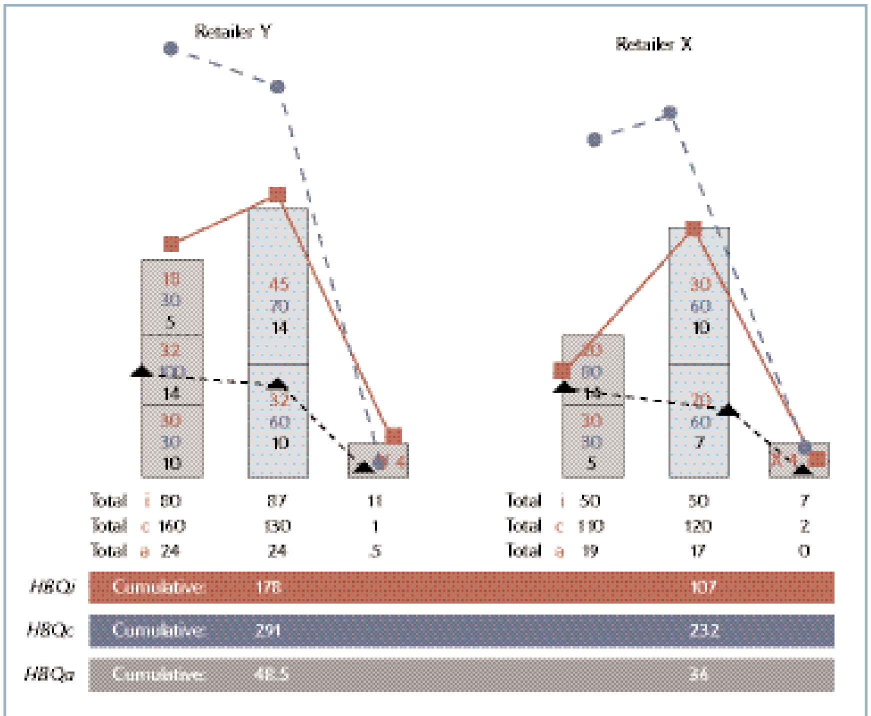

Figure 4 Caption

needed a discernable straightforward community approach.[4] Here things can get a bit dicier. Since many firms today will not pay a supplier until the raw material or product is moved, consumed, and generally purchased by the next step in the supply chain (there are exceptions), payment terms tend to get longer. This heightens the sense of holding the bag. Figure 4 shows the "pile-on."[5] Here we see the cumulative and individual pictures in these chains. More days in total of inventory – ***i***; poor and long cash cycles – ***c***; and longer cycle times – ***a***. Less agility can mean lost sales, so we see the advantage with retailer X.

Retailer X is not only a leaner more responsive network, but individual firms are getting a better positioning within the network. This phenomenon occurs in just about every industry we surveyed. Over time, as the network performs better – increasing sales and better margin – the community continues to pull ahead. We consistently have seen this as suppliers frequently reduce their share of non-performing channels, and in fact, a strong brand may leave the network outright, determining the HBQ burden is not worth the return.

In spite of their power, who's network would you want to be in, Wal-Mart or Kmart?

Building an Environment to Create Performance

In the virtual chain, our linkages with our trading partners are more critical than ever. Yet most firms still seem obsessed with internal activities rather than making the linkages more effective. If the goal is a highly coordinated network of partners with shared business objectives, coordinating and synchronizing to serve markets with the agility of a single well-run organization, then the 3PE's, in the links, have to reflect that.

Strategies like VMI, build-to-stock, or even maintaining idle capacity for so-called postponement/agile/build-to-order models inherently add cost to the chain. But these investments have been put in place to support vague concepts of market requirements.

That is why the creation and pursuit of real-time granular data – SKUs in motion through the supply chain – is critical. We have to move from vagaries to realities. Getting the data and understanding how it guides our business behaviors is crucial. From that the network can re-evaluate these assumptions about what they must do to win.[6] Understanding the true nature of your market, your customer, supplier, and requirements is so critical to business success that it means the difference between customer retention, product profitability, the valuation of the firm, and even the life and death of the enterprise. A fresh view and action is required. As Abraham Lincoln said, "Our case is new, so we must act anew"! ■

Endnotes

1 The larger firms consume year over year share, either through M&A or competition, with the smaller firms going out of business.

2 Clearly not everyone's practices are best-in-class.

3 Contact www.clresearch.com for information about these industry surveys.

4 Concepts like cash to cash cycle times are hard to apply into a behavioral context. Whereas as DSO by customer are quite traceable to specific customers and even specific orders so firms can understand why the are not getting paid- late shipments, poor fill rates, poor T&C in specific contracts can be fixed.

5 Graphic is not is not precisely at scale.

6 ChainLink has a report on new approaches for demand management in a network.