



# supply chain strategy

A newsletter from the MIT Center for Transportation & Logistics

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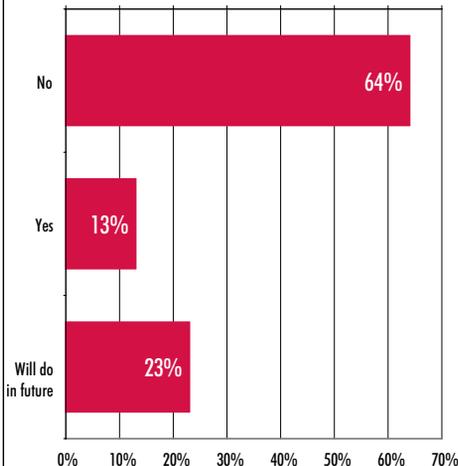
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(Source: IOMA Carbon-Efficient Supply Chain Survey)

## Making the Right Connections Between Supply Chain and Strategy

**C**ORPORATE STRATEGY AND SUPPLY CHAIN SHOULD BE IN ALIGNMENT and pulling together—assuming that managers know what the current strategy is. The problem with such generalizations is that strategy is a moving target; it changes with the business environment in which companies compete. These frequent readjustments tend to nudge the organization out of alignment.

How can companies realign strategy and supply chain even as the company is being buffeted by competitive forces? One answer is that management might decide not to take any action because the net impact on the organization would be negative. On the other hand, the misalignment might be causing so much pain that not fixing it hampers the company’s ability to compete and could lead to other maladies.

To diagnose the problem and take the appropriate corrective action, companies need to identify misalignments from the top of the organization to the bottom and decide which ones require attention. But that only provides a short- or medium-term solution; next they need to take a longer view of the competitive environment and build this vision into their strategies. This first article in a two-part series looks at the immediate challenges using strategy realignment, a methodology developed specifically for the task. The second article will consider strategy visioning, a tool for solving long-term alignment issues.

### Constant Change

When it comes to aligning strategy, “companies don’t have a great deal of patience,” said Mahender Singh, head of the Supply Chain 2020 research project at the MIT Center for Transportation & Logistics, Cambridge, MA. Strategy realignment and strategy visioning were developed by the Supply Chain 2020 team. The tendency is to occasionally look at broad-brush functional areas and match them to the strategic goals of the company. But to ensure that core functions such as supply chain are moving in the right strategic direction, a closer look at the inner workings of the organization is required.

There are countless examples of operational cogs that can be out of synch and the cause of friction within the enterprise. For example, “one of the overarching objectives might be that the organization focuses on very high

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## Reformulate Your Supply Chain to Support Strategy (continued)

capacity utilization—it is going to keep pumping out product at a high clip,” said Singh. At the same time, a goal has been set to maintain low inventory levels. “These goals don’t go hand-in-hand; they seem to run counter to each other,” Singh said. Moreover, the balance between the two can see-saw in response to a number of variables that shift over time. For instance, if the product is perishable or valuable, the need to drive down inventory might make more sense than the need to maximize production rates.

Even so, plant managers may continue to put more emphasis on pushing utilization rates to the max due to

poorly conceived incentive schemes. Demand fluctuations further exacerbate the imbalance. And a deeply entrenched silo mentality promotes these divisions (for more on this, see “Supply Chains That Hold the Key to Unlocking Silos” in the December 2007-January 2008 issue of SCS).

Similarly, there might be tension between “push” and “pull” objectives in the organization as the market changes. Traditionally the most cost-effective option has been to “push” product into markets in large batches. But growing demand for more customization is moving the market toward a “pull” regime that requires smaller, more frequent

### IMPLANT ALIGNMENT IN THE BUSINESS

Making sure that your supply chain is in step with the organization’s high-level goals is easier if managers on all levels are aware of the importance of alignment. That can come from strategy alignment workshops that embed these notions in the company’s everyday work environment.

In a typical workshop, managers from supply chain and other disciplines such as sales consider some examples of the company’s product supply chains. They are briefed beforehand on the supply chains and associated go-to-market strategies.

A series of break-out sessions follows. The first one focuses on the supply chain strategies required to support, enhance, and be an integral part of the competitive corporate strategy. A second session builds on the preceding one by looking at the operating models and an aligned and balanced set of operational performance objectives. The final session considers the practices that are tailored to the operating model and to meeting performance objectives.

Workshops staged in 2007 by a major manufacturer of microprocessors provoked more strategic thinking on the way the organization designs products in Asia. For example, designers routinely considered bill-of-materials costs but seldom took account of the supply chain savings that accrue from using standard rather than customized components. The workshops exposed the

designers to supply chain issues they had previously been unaware of or had not taken into account.

In addition, the exercise encouraged the managers to view the company in the context of the broader market. For example, they looked at the intersection between customer response, efficiency, and asset utilization and the mix of capabilities the company—and its competitors—need to achieve the optimum balance between these capabilities. This broad-brush view of the organization’s goals is now a regular feature of internal presentations.

After going through the methodology in several workshops in 2007, a market-leading manufacturer in Asia realized that it lacked a clearly articulated business strategy. The company also needed high-quality data on its customers. In the business-to-business markets the manufacturer served, it had become separated from end customers by various middlemen such as distributors. This was an important finding because the enterprise was looking to expand into business-to-consumer markets where an intimate knowledge of customers is essential.

The manufacturer aims to hone its business strategy after further strategy alignment workshops in 2008 and then implement a pilot supply chain project that will reflect the lessons learned. A new organizational structure will follow.

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production runs and shipments. How does the organization deal with these conflicts that spring up over time due to changing environment and business imperatives?

The point is “there will be contradictions, and they will always be there to some extent; we want to highlight that alignment is not an end point—it’s a journey,” Singh said. Business is all about trade-offs; perfect alignment of your strategic stars may not be possible or it may only be fleeting. For most of the time, strategic alignment is a compromise.

That doesn’t mean the company should be resigned to a mishmash of conflicting and competing goals. At the very least, by making an effort to uncover these contradictions, “you can highlight the misalignments and scrutinize them in more detail,” Singh said. And by analyzing the outcomes and comparing them, you can decide which problems need to be addressed and which ones can be tolerated. The objective of this exercise can be stated in simple terms as “you find a way to minimize the downside and keep the upside,” he said. In effect, you are making the best of the investments in the structure of the business that you have already made. And along the way, you will gain a more intimate knowledge of what makes the organization tick.

## Functional Road Map

One way to do this is to construct a comprehensive map of various aspects of the supply chain function—observing what is going on, not just asking. “Take a detailed look at the things you are doing today on the ground, how you are operating your supply chain,” Singh explained. Ask questions about what the objectives of specific activities are and why they are managed in a certain way; read documentation and analyze process flows. “Look at all the different initiatives you have in place and build a map of how you are actually executing your supply chain.”

In tandem with this on-the-ground, bottom-up effort, you should be constructing a map of the high-level purposes that are meant to drive the operational engine. “Ask senior executives about their core objectives, and break these down into

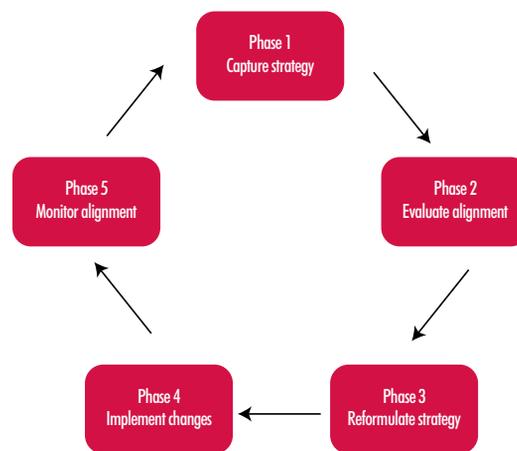
the functional themes that support the goals,” Singh said. There may be four or five overriding objectives that top management has set for supply chain, and these can be tied to the functional activities that underpin them.

These top-down and bottom-up views of the organization are captured in a strategy map. By comparing the strategic goals with associated ground-level practices, you will identify where the misalignments are. “You might see that by fulfilling an important goal set down by the strategic team, the decision makers, you are actually hurting five other functional areas because no one has analyzed the bigger picture,” Singh said.

The map rates each functional activity on a scale of -3 to 3 in terms of the extent to which each moves the strategic goal forward or backward. Specifically, a negative score indicates a “hole” where the strategy and the activity are out of step and hurting the achievement of the indicated objective.

Each misalignment is evaluated for its impact on the efficiency of the supply chain and the organization generally. If the price you are paying for a misalignment is sufficiently high—both in terms of the costs incurred and competitive-

## The Strategy Realignment Process



(Source: Singh and Perez-Franco)

## TRY A NEW VINTAGE

When corporate strategy and supply chain diverge to such an extent that the viability of the business is threatened, a radical shift in thinking is called for.

Take the case of an Australian wine company that was finding it increasingly difficult to forecast demand and supply the market with the right product. It had to predict what wines would be in vogue three to five years ahead. But the long growing cycle for grapes, the uncertainty over yields with each harvest, and the lengthy time required to make, bottle, and distribute bottles of wine made forecasting extremely difficult. The supply chain

was long and subject to much uncertainty.

The company took a radical step: it sold its vineyards and manufacturing unit. It still had to anticipate buyer preferences, but to shorter time scales because the company buys grapes on the spot market and contracts out its manufacturing needs. Costs have gone up, but the added flexibility and agility makes the overall business model more effective. This drastic action ran counter to standard practice in the wine-making industry, but the end result was a business more in line with the markets it serves.

## Reformulate Your Supply Chain to Support Strategy (continued)

ness—then there are grounds for taking remedial action. However, if the cost of eliminating a disjoint is more than the payback or the actions required are excessively disruptive, the decision might be to leave well alone and monitor the situation. Another option is to adjust the strategy that has become out of synch with conditions on the ground.

### Looking Ahead

This exercise takes a three- to five-year view of the enterprise, depending on the type of business involved. The next step is to look further ahead to the competitive environment over the next five to 10 years. “Having looked at what you

#### [Key Takeaways]

- » Corporate strategy is not a permanent fixture in the company; it shifts with the business climate and the evolution of the company. To keep supply chain in line with strategy, you have to pinpoint the disjoints, fix those that should be fixed, and realign the organization.
- » Realignment requires you to put the supply chain under a microscope to determine how specific functions and operational actions gel with the company’s high-level goals.

can change in the short run, how can you build on these capabilities in the years ahead?” Singh said. This step, strategy visioning, will be described in the second article in the series. ♦

## Choose the Right Tools When Transformation Is Your Goal

Looking to make big changes? Beware of Six Sigma and Lean

BY RANDY FIKE

**IS YOUR ORGANIZATION SWIMMING** in Six Sigma projects while processes are still fundamentally broken or awash in Lean Kaizen improvement events without seeing sustainable improvement?

Companies in pursuit of operational transformations habitually rely on two management tools to achieve their objectives: Six Sigma and Lean. Both can have an important role to play in improving operations, but how to incorporate them into an overall transformational change is often misunderstood.

The key for a company to transform itself and establish and deliver operational excellence (OE) is to create its own version of the GE and Toyota story; a story that applies Six Sigma and Lean to not only fix operations where appropriate, but also fix organizational design problems and build the leadership skills necessary to operate within a new paradigm.

### Fragmented Effort

Six Sigma can capture incremental operating improvements using a statistical-based process, but it is not designed to do the heavy lifting of organizational and leadership change needed in a large-scale transformation.

The methodology is a set of practices designed to systematically remove product or service defects and is a useful tool for improving quality incrementally and establishing a culture of continuous improvement. It is not the right tool to crack the much bigger OE nut, however. Indeed, Six Sigma has lost

much of its original sheen because companies have realized that the results of these programs are often not commensurate with the huge effort required to create and sustain them.

Moreover, elaborate Six Sigma programs with their multiple layers of resident experts can distract management from

### SUPPLY CHAIN FALLING SHORT

Most operational excellence (OE) initiatives in supply chain fall short of their improvement targets. In fact, a rule of thumb is that some 70% of OE implementations in supply chain fail.

There are various reasons for this dismal performance. Employee resistance is a prime example. Change can be very stressful for individuals, particularly when faced with a multiyear OE project that promises to transform the organization. Moreover, management behavior might not support the necessary changes. Another hurdle often encountered is inadequate resources or budget.

Success in OE depends on multiple factors. Keep in mind that the required changes can take years to implement so use quick fixes judiciously and avoid Band-Aids that will not be sustainable over the long term. Don’t underestimate the importance of personal involvement and leadership in these large-scale projects, and be flexible because along the way, you will have to modify your plans and solve unforeseen problems. The toughest challenges will be the most difficult to measure and track, but that’s no excuse for not addressing them.