A number of innovations were highlighted at a recent symposium on the future of RFID organized jointly by MIT-CTL and Stanford University’s Global Supply Chain Management Forum. Tags embedded into bottle tops help prevent counterfeit product being put into the container. The tag is destroyed when the bottle is opened. A multinational company sees a big image payoff from RFID, since the tagging of products re assures customers that the company is doing all it can to protect its wares. A consumer electronics company uses RFID to make sure that its first-in, first-out rules for product dispatch are adhered to, which is particularly important for product with a limited shelf life.

In many ways the development of RFID is actually the chicken-and-egg story. The more users implement the technology widely, the more effective it is, but companies are waiting for the other guy to make the commitment first. Still, that’s no excuse to put the technology on permanent hold. As Asiala pointed out, the sheer number and type of assets that can be tracked using RFID is one of its main strengths, and the technology is being refined. “Our strategy is lined up on making the right choices and the right integrations,” he said.

When supply chain strategy lines up with corporate strategy and the balance is maintained through careful monitoring, the company is better able to compete because it is strongly focused on its goals for growth. That takes care of the present, but how do companies avoid being jolted out of alignment by a sudden market change or major operational disruption down the road?

That is not to suggest that companies should be constantly adjusting strategy to allow for changes that may or may not happen. Rather, by being open to future developments, they can build enough flexibility into the business so that a future shock does not bring it down like a house of cards.

In the first part of this two-part series, we explained how to align supply chain and corporate strategy (see “Making the Right Connections Between Supply Chain and Strategy” in the March 2008 issue of SCS). In this second article we look at strategy visioning—how to sensitize the organization to longer-term change and adjust alignment accordingly.

In an alignment sense, “long-term” can mean anything from approximately three to 15 years. “It depends on the industry’s clock speed,” said Mahender Singh, and the scope of the exercise. Singh leads the MIT Center for Transportation & Logistics’ (MIT-CTL) Supply Chain 2020 project, the research that has developed the strategy alignment methodology for supply chain.

The first step in the strategy visioning process is to create three or four scenarios that depict how the market might look ahead of time. “The idea is to stretch your imagination and suspend your disbelief,” said Singh—in other words, to loosen the ties that bind you to established practices and business models. Envisage developments such as changes that radically alter the commercial landscape and create or destroy business opportunities. A useful technique is to question accepted wisdom and flip existing business models to create fictional situations in which the ground rules run counter to the ones people are used to.

These projections can be on a corporate level and involve broad changes that occur far ahead or be much narrower by focusing on a business unit and extending current changes to a few years hence. The long-term view will be more qualitative, less quantitative, and less granular than the narrower view.

An in-house team of decisionmakers should own the scenario exercise. These managers “should understand how the company thinks and be familiar with key market trends and the peculiarities of the business,” Singh explained.

MIT-CTL has developed three generic scenarios that are designed to open minds to new possibilities. In one scenario, called Alien Nation, global trade is stymied by mistrust between trading partners and trade barriers have proliferated. Synchronicity is at the other end of the spectrum, a scenario that postulates a trusting trade environment where international business is thriving. In the middle is Spin City, a world in which there is dense regulation, but globalization is still an important driving force. (For a more detailed explanation of each of these scenarios, go to the SC2020 Web page at www.sc2020.net.)

These general scenarios are useful for exploring future alternatives, explained Singh, but companies should create their own versions that are tied to specific areas of interest. An example would be a world in which China has suffered a major financial or environmental setback that puts the coun-
try on a different growth track and African nations are major contract manufacturing centers.

Such scenarios can also be used to explore different supply chain strategies. The advantage of this approach is that it is based on ideas that the participants have already thought about in detail. As Singh pointed out, “people need to become very familiar with the terminology, they have to own it and buy into it.” Being intimately familiar with a scenario makes it easier for the participants to make decisions on what actions they would take in particular situations.

Having generated the scenarios, the next step is to analyze each one in terms of how the company would compete in respective environments. Generate different business and supply chain strategies for each scenario. “Based on this understanding, what kind of supply chain would I develop? What would be its focus?” said Singh. Is it a supply chain where flexibility is a core capability, or is it cost-focused, for example?

This is usually done in a workshop format, where participants are divided into teams and each team brainstorms around a given scenario. The results of these deliberations are presented in a general session to identify which strategies are good candidates for further consideration. “You will come out with a loose definition of what your supply chain network objectives are for each of the scenarios,” Singh said.

Some will offer no or few benefits and, as a result, will not merit further attention. Others will be beneficial and be worthy of closer examination.

Finally, the favorable strategies, the ones that offer clear paybacks in the situations you have considered, are used as inputs to the alignment exercise. The first article in this series described how you can plot different actions and processes on a strategy map to determine which ones create “holes” or disjoints between supply chain and corporate strategy (see diagram). In much the same way, you can plot the actions associated with the strategies you gleaned from the future scenarios.

“In all probability, these new ideas will not be aligned,” said Singh, but that’s part of the process. “You have to start crossing and connecting the ideas to see how your current operations will be helped or hindered.”

Sample Strategy Map

![Strategy Map Diagram]

(Source: Singh and Perez-Franco)

**[Key Takeaways]**

- You can align supply chain and corporate strategy in such a way that the organization is better able to absorb and adjust to future shocks such as sudden market shifts.
- To do this, you need to construct scenarios that challenge the status quo, and then incorporate the lessons from this exercise in your operations map.

April 2008 | 5
Align Your Supply Chain With Change (continued)

The aim is not to redesign the organization so that it is prepared for whatever changes lie ahead; clearly, such a goal is impractical. However, you can enable the organization to flex with change and prevent the connections that tie supply chain to corporate strategy from fracturing when the organization lurches in a new direction. Also, by being open-minded to change, you are more receptive to the opportunities that market upheavals create. As Singh emphasized, “The first step towards resilience is being aware of the possibilities.”

Mapping the Road to Excellence
Take measured steps if excellence is your destination

RANDY FIKE

YOU HAVE DECIDED THAT OPERATIONAL EXCELLENCE (OE) is your goal and the best way to achieve it is by transforming the organization. This is a major undertaking that can deliver huge paybacks, providing your objectives are clear from the start and attuned to corporate strategy.

In the March 2008 issue of SCS, we explained how choosing the right tool box—with particular regard to the relevance of Six Sigma and Lean—gets you off to a good start (see “Choose the Right Tools When Transformation Is Your Goal”). In this second article, we take you through the next steps—homing in on the issues that matter so you can develop a game plan that has the legs to carry you through to excellence and keep you there.

One Step at a Time

OE should be built in incremental steps, and each step has to be well-founded and designed to lead to the next one with a minimum of disruption. That said, your efforts will inevitably cause upheavals, so make sure that your first lap is impressive enough to give you the momentum to reach the finish line and beyond.

In an operational sense, this means achieving fundamental shifts in performance through well-planned redesigns of the organization and the processes that make it tick. The leadership team should always be focused on relentless continuous improvement without losing sight of corporate strategy.

To accomplish all these aims, the transformation effort needs to concentrate on the value chains that drive the company toward its target objectives.

Map the Chains

Before you try to fix a process, you first must map the value chains that need to be transformed to drive the strategy. Initially, choose two or three strategic chains and get started promptly because building early momentum is paramount. The chains should offer the potential for significant improvement. Achieving gains of 10 percent to 30 percent at the beginning gives your organization the impetus to keep moving forward and gives the management team the burning platform it needs to sustain a large-scale transformational effort. Other aspects of the initial value chains to be aware of include the following:

- They represent relevant companywide issues and can be used to make the case for an overall transformational program across the organization.
- They offer a showcase for the transformational effort and demonstrate the level of improvement that can actually be achieved.
- They create an appetite for change within the organization. For example, the value chains shape the initial practitioner team that will accelerate the rollout and help build the management capabilities that are required.

The mapping exercises should first be done at a corporate level then cascaded through the business units and down through the functions. Supply chain will be an important part of the high-level exercises if it is a primary driver of corporate strategy and in need of transformation. However, if supply chain is not a strategic driver, then the mappings can be carried out within that functional area as part of a more limited improvement initiative.

The exercises also help the management team to avoid the Six Sigma trap of project proliferation (see the SCS article referred to above for more on Six Sigma and OE). The challenge is that Six Sigma participants can create work just to quality for the next certification level. Worse, the multitude of projects often conflict with each other or run counter to the overall corporate goal. The workload can add substantial overhead as black belts manage, coordinate, and report on the projects put in place to senior management. Here are two ways the mapping exercise can help avoid this:

- After mapping the value chains to find the strategic ones that will drive the corporate objective, rationalize all projects against this list. If the projects do not line up with the strategic chains, kill them.