SUPPLY CHAIN EVENT MANAGEMENT
CATEGORY, FUNCTION OR JUST ANOTHER BUZZWORD?

By Deb Marabotti

One of the newest morsels on the tech industry's buffet of buzzwords is Supply Chain Event Management (SCEM.) And though in past years enterprise software buyers seemingly displayed an insatiable appetite for the latest acronym, times have changed. A tighter economy and jaded IT community has analysts trying harder to define SCEM and corporate managers working diligently to understand whether or not they need it.

Unlike CRM and some other popular “techronyms,” SCEM hasn’t ballooned into an all-encompassing category of its own with blurry boundaries. Analysts appear to agree that SCEM is a function or capability within the larger realm of supply chain software. One reason is SCEM is not a stand-alone application; it requires an underlying business system that collects day-to-day transaction data and organizes it. Another reason is SCEM is a discrete feature supply chain software vendors easily have added to their product suites through partnerships, acquisitions or by developing the functionality themselves.

But classifying a buzzword as a function rather than a category doesn’t answer whether or not the enterprise needs it. Many business managers still aren’t clear on what benefit SCEM delivers and where to apply it for rapid ROI.

Parsing the Techronym

Supply Chain Event Management evolved as an extension of process control. Organizations manage their processes with planning. But even the best laid plans can be interrupted by the unexpected. Consider a new product launch with an initial forecast that underestimated demand. In today’s just-in-time manufacturing era, companies quickly discover not enough finished product exists to fill orders. Then, they find scant time available to procure more supplies and make more products within client delivery requirements. Add to the supply-chain complexity other product launches in multiple markets for numerous customers, and process breakdown becomes a snowball expanding in size and gaining speed as it barrels downhill.

SCEM software enables companies to respond rapidly and sometimes automatically to unplanned events — without having to completely regenerate plans. SCEM applications accomplish this by notifying supply chain managers when specific “events” occur, e.g., when inventories are depleted, shipments delayed, etc. Data that represent exceptions from plan are red flags. Often times, automated responses can resolve these issues promptly, but in all cases managers have the opportunity to analyze problems and determine solutions.

This visibility is SCEM’s greatest benefit. Seeing a problem is 90 percent of fixing it. Individual events are leading indicators; i.e., opportunities to stop the snowball a few feet farther up the hill. In the past, companies dealt with emergencies after the figurative avalanche crushed the village. Supply chain managers waded through reams of reports after the fact and attempted to mitigate the damage of lagging production schedules missed shipments or spiraling costs. Only goodwill might keep a disgruntled customer in the fold.

Beyond Benefit into Value

Sharp managers apply the benefit of supply-chain visibility as leverage in continually fine-tuning processes and planning. This translates unplanned events and exceptions into opportunities to accelerate production schedules, prevent missed shipments and contain costs. In the long run, SCEM software not only improves efficiency, but increases customer satisfaction.

The key is the human element. As mentioned earlier, SCEM software can automatically respond to events; e.g., trigger electronic purchase orders in response to low-stock alerts. This is done by integrating SCEM software with other business systems, such as purchasing applications. But without managers monitoring exceptions, analyzing impact and developing solutions to problems, SCEM software offers little benefit beyond convenience.
Furthermore, SCEM is more powerful when its underlying system collects business intelligence from multiple sources across the supply chain, inside and outside the organization. As noted before, visibility is SCEM's greatest benefit. Adding data sources and including supply chain partners broadens visibility and therefore multiplies the benefit. Today's best business intelligence software uses the Internet to gather information and share it along the supply chain.

The most effective SCEM occurs when exception alerts quickly reach the managers most capable of resolving issues, regardless of their position in the supply chain or their location inside or outside company. What makes SCEM even more powerful is combining it with resolution capabilities that would suggest a solution to the person (or people) who have been alerted to issues. A very simple example would be the ability to automatically create a purchase order or requisition request when inventory falls short of a certain threshold. This would be done from the SCEM system and integrated back to the business system so the user can resolve the issue quickly and effectively in a single process.

SCEM, when supported by KPI rules, closed-loop actions (resolutions) and performance analytics, is central to influencing and enhancing corporate strategy, plans and performance.

**Applying SCEM**

SCEM applications necessarily vary by industry, business environment and organizational requirements. But in all cases the greatest pitfall is reacting to SCEM's elevated tracking ability rather than using it for analysis. Analytic applications counter this tendency by aggregating data from key business systems at a high level and presenting the ramifications of exceptions and the possibilities of solutions. The end result is a proactive, much for efficient, process.

For example, suppose the event management system alerts the transportation manager to a late inbound shipment. Then, assume the transportation system is linked directly to the WMS and order management systems, but none is feeding information to an aggregate-level system such as an analytic application. The WMS would notify the warehouse manager, who would alter the proper truckload to the affected customer. At the same time, a customer service person watching the order management systems would notify the customer of the changes. Meanwhile, the transportation manager, who saw the initial alert, could have found the inventory elsewhere that compensates for the late inbound shipment. The customer will have the order filled on time after all, except none of the several internal people reacting to the initial alert knows that. And now the customer believes the order will be late.
No time or effort would have been spent if the organization had an analytical application in place with alerting capabilities. Everyone involved would have had the alert and been able to view inventory, allocations and open orders at the aggregate level. The first, and only, decision made would have been to move inventory to fill the order. No contact with the customer was necessary. Reacting to deep transaction detail mobilized more managers than needed and possibly unnecessarily upset a customer.

In addition to the example above, SCEM is most likely to yield big returns in a short period of time for organizations that need to:

- **Monitor large numbers of markets/channels, customers, vendors and products.** The shear amount of data lends itself to event management. Managers responsible for dozens of products and hundreds of customers would be overwhelmed by day-to-day activities if forced to respond to a detailed inventory report. With analytics-enhanced SCEM, they focus instead on exceptions, such as inventory levels approaching forecast limits, service levels or days of supply.

- **Support new product launches.** With SCEM, variations in demand would trigger specific events, which would trigger alerts, which would focus managers, who would, in turn, take action. Inventory could be transferred, more material purchased or any number of tactics implemented to replenish product quickly and meet orders on time.

- **Track to key performance indicators.** For many companies, one of the first steps in getting processes under control and managing them is to start at monitoring Key Performance Indicators (KPIs) and analyzing the causes of out-of-range alerts. For example, company XYZ may monitor inbound transportation costs because they are increasing beyond forecast expectations. Analysis could show that inbound purchase orders are being expedited because materials are not being ordered within proper lead times, which, in turn, causes slippage in production schedules and customer shipments. An event management system might detect missed production and late shipments, but without analytics the fact that material is being ordered late, transportation costs are rising.

- **Balance supply and demand.** Today’s fast-paced marketplace also requires organizations to balance supply and demand continually. Surplus and shortage have the same ultimate effect — shrinking profit. As companies improve their sales and operations planning, SCEM is becoming the best means of implementing and monitoring those plans. Add analytic applications for translating variances into improvements and this new buzzword becomes more than another acronym for ROI.

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