The Future of SCM Includes an End-to-End Vision

Applies to:
Supply-chain management (SCM)

Summary
Supply-chain management (SCM) is evolving rapidly. For SCM to pay off for an organization, support for end-to-end process is crucial, according to Sree Hameed, Director of the Applications Solutions Management Group at SAP Labs.

Mr. Hameed contributes product strategy in the areas of supply-chain management, product lifecycle management, and manufacturing. He is also currently an advisory board member at the Center for Intelligent Supply Networks at the University of Texas in Dallas. Recently, he spoke with Catherine LaCroix, SAP contract writer, about a clear definition of SCM and how it has evolved over the last decade.

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**SDN:** What is SCM today?

**Hameed:** It means different things to different people, depending on where they are on the supply chain journey. The nature of supply chains is constantly evolving. It used to be that in a vertically integrated organization, the vice president of supply chains had direct control over the demand, distribution, and manufacturing functions. But then manufacturing got outsourced, and more of the supply chain responsibility shifted to VPs of procurement. In fact, some organizations would argue that supply chain management is procurement. So you ask people, “What is SCM?” and you get many definitions. Some will argue that there are supply chains and demand chains, which doesn’t make sense. Supply-chain management includes both the demand and supply sides of the equation.

**SDN:** Why does supply chain mean different things to different people?

**Hameed:** Mostly, it’s due to a “silo” perspective, in which people in a supply-chain function put up blinders. They look at the functional process, but seldom at the end-to-end process. But if you forced everyone to look at the end-to-end process, their views would converge towards a shared vision. We’ve seen this disconnect with our students in the supply-chain program at the University of Texas. In the academic setting, participants view their supply chain as an end-to-end process. But once they get into their job function, they narrow their focus because these other supply-chain functions are “someone else’s problem.” My hope is that, during the evolution of the supply chain, there will be a time when it will always be thought of as an end-to-end process. When you get the whole perspective, you actually see how money is being made, not just for your enterprise but also for the whole value chain.

**SDN:** How does SCM differ today from when it was initially developed?

**Hameed:** When we first introduced the concept of supply chains, there were walls between each step in the process of making products. You first designed something, then you had to source, make, move, store, sell, and sometimes service it. Over time, the walls between these processes came down and the supply-chain perspective got broader for the simple reason that you had to address it that way in order to be profitable and succeed in business.

**SDN:** How did the walls eventually come down?

**Hameed:** If you step back, you’ll see that the supply-chain perspective has evolved from an inventory-centric view to an order-centric view, and now, to a product-centric view.
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The following graphic describes the evolution of SCM:

Before 1990, suppliers still had the power and would push products to customers through a vertically integrated organization. Products didn’t really change much, so the supply-chain structure was static. Thus, the focus was largely on moving inventory through a static supply chain.

But as the power shifted to customers, the first set of walls came down in order to evolve to the order-centric paradigm. In order to focus on the order, you need to take down the walls between “sell” and “source.” Unfortunately, companies were focusing mostly on their immediate customer, not the end-consumer in the value chain.

Today, many companies face a situation where service levels and price are no longer enough to differentiate their offerings. So as product variety began to explode, the supply chain became very dynamic. This last shift represents the evolution to a product-centric view. Now the focus has expanded to include the product lifecycle and lifecycle profitability. The lifecycle view is what forces companies to take an end-to-end perspective.

SDN: How would you describe the end-to-end process?

Hameed: A product-based supply chain consists of these seven core processes: design, source, make, move, store, sell, and service. You can define the end-to-end lifecycle with the product (not a service) falling into each of these seven areas. It has to go through a design phase, as it will be made, sourced, moved, stored, sold, and serviced.

Unfortunately, “megatrends” indicate that achieving an integrated view across these seven core processes is going to be a major challenge. For example, outsourcing and globalization are actually fragmenting this view, and it is impossible to gain a holistic view without the technology to virtually manage the end-to-end supply chain. To make matters worse, fragmentation also introduces latency, which makes it hard to meet time-to-market objectives in an era of shrinking product lifecycles.

Ultimately, you need visibility into the end-to-end process because you risk losing money if you’ve got “blind spots” in your supply chain.
SDN: How will SCM evolve in the future?

Hameed: In the future, we have to look at the entire process. If you think about it, the only person who looks at end-to-end processes in most companies today is the CEO. Engineering, sales, and manufacturing are only looking at their own “box” and then report into the CEO, who has to keep an eye on everything. At some point, they all need the end-to-end perspective.

SDN: How will SCM-based roles shift in the future?

Hameed: We’ve come to the point where the traditional definition of a supply-chain manager might be limiting. In many companies, there’s still a wall between supply-chain people and engineering people. Supply chain sees inventory. Engineering looks at continually improving the product. Engineering might make a change to the product design, but not realize that the manufacturing costs will wipe out any margins. These critical cross-functional conversations are not happening. In reactive companies, these eventually happen when companies start to lose money. The smarter, more proactive companies are now taking the walls down themselves. They know they need to listen to customers and convey customer feedback to design engineers. If you’re a leader, you set the bar high and push it even higher.
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