

Innovation Through People, Process and Technology

Companies have been grappling for the past two decades with what will drive the evolution of supply chain management. At General Motors (see Interview, page 12), Adriana Karaboutis suggests that it's people (for domain expertise), and business reengineering expert James Champy maintains that it's process (see Viewpoint, page 45).

You would think that we at i2 would cite technology. But we don't. When I cofounded i2 with Ken Sharma almost 20 years ago, we were focused on process innovation. In fact, we embedded many processes in our software. But software alone cannot drive change. The companies that receive the full range of benefits from their software implementations also implement business process changes.

What is our approach to supply chain innovation today? I like to think of it as the analysis of extremes. We encourage i2 employees to envision our customers at a theoretical level of best performance, or what we would call extreme performance.

Let's take inventory as an example. We might ask, "How can a customer reduce its inventory by half?" Instead of contemplating moving from \$100 million in inventory to \$50 million, we suggest finding ways to achieve near-zero inventory—which would be considered extreme performance. Thinking about that near-zero state helps us to understand with greater clarity the first principles and process changes required to support our goal—in this case, inventory reduction.

When thinking about the processes required to effect such a step-level change in performance, we ask our people to think about what technologies might not only support new processes but also be the catalyst for them. At i2, we believe that technology should focus on supporting advanced processes—those that make a company more agile. When this is the case, process innovation is symbiotic with what technology is capable of doing. The result is greater agility, or "managing in the face of variability." In other words, today's advanced processes help companies manage risks, exceptions, demand and other variables resulting from market and competitive forces.

Enhancing iterative capability

Innovations in supply chain management have come, in large measure, from the ability to iterate multiple scenarios at high speed, enabling businesses to make better-informed decisions faster, as problems arise. As an example, say your demand level is at 100, but your supply is at 80.

What should you do about the disconnect? Should you produce more to meet the demand or, through a combination of promotion and production, achieve a demand/supply balance of 90-90? Which approach will be more profitable for your business?

Problems like this arise every day in supply chain management, and innovative processes and technologies can support the iterative process needed to solve them.

We used a unique combination of process and technology innovation to create an agile demand/supply management process for Panasonic, for example. As Mike Aguilar, Panasonic's senior vice president of supply chain strategic initiatives, explained, "When Panasonic took on the project of shifting our emphasis from supply to demand and shifting our forecasting to a point-of-sale system, we had two choices. We could go through the traditional process of buying software and installing it inside our company... or we could have i2, which has extensive software development and consulting services, perform the data capture and analysis for us. We decided to 'rent' both the software and i2's expertise in forecasting analysis. We were able to get this project going in just a few months rather than a few years." (*Supply Chain Leader* Interview, Spring 2006, pages 6-7.)

Through this approach, Panasonic achieved increased revenue and inventory performance in a short time. While we know that profound change is not a short-term proposition, we also appreciate that early successes are important in overcoming the resistance to change inside companies. i2 Operations Services is helping more and more companies like Panasonic move from a less desirable to a more desirable end-state of best practices and process excellence in the timeframe demanded by increasing globalization and customization.

Besides driving greater and faster process and technology innovation, the approach we take with i2 Operations Services creates a greater synergy among people, process and technology. It's my belief that it isn't just the functional walls that need to come down inside companies. It's also the walls separating these three interlinked engines of high performance.



Sanjiv Sidhu is the cofounder of i2 and the chairman of the board.

Contact: supply_chain_leader@i2.com.