

## **Is Cisco Really Driving 21<sup>st</sup> Century Supply Chain Innovation?**

Earlier this year, World Trade Magazine's Neil Shister wrote an article titled "The 21<sup>st</sup> Century Supply Chain: Cisco Builds a Supply Chain."

Beside the article itself, what I found particularly interesting was his adjunct sidebar interview with Cisco's Vice President, Worldwide Manufacturing Angel Mendez.

Mr. Mendez, who Mr. Shister referred to as a "bona fide star in the supply chain world," made a number of interesting observations in response to a series of equally interesting questions.

One which stood out was Shister's query as to whether Cisco was "inventing a new business model."

### [Adaptive is the operative word](#)

While Mr. Mendez indicated that the Cisco approach consisted of both the improvement of existing "supply chain tricks" as well as the introduction of a few new ones, it was his assertion of what makes Cisco unique that is worth noting. Specifically, that Cisco is "driving an adaptive supply chain in a very large outsourced model across a very large spectrum of products and geographies."

Over the past few months I have written numerous articles and PI posts ranging from the importance of effective cluster development and the emerging Global Value Chain to the evolution of the dynamic Metaprise which is based upon effectively identifying, understanding and incorporating into an organization's strategy the unique operating attributes of key stakeholders both within and external to an enterprise's supply practice. (Note that I did not use the word supply "chain" as the term is a misnomer in that it implies a sequential architecture. In reality, today's supply practice should be defined as a synchronized collaboration between disparate stakeholders which drives maximum value through an adaptive engagement mechanism. A mechanism that includes the utilization of advanced algorithms to predict and drive viable real-world outcomes. And this is the key to the Mendez statement.)

The ability to effectively adapt however originates with the desire and determination to understand the processes that define your practice including those of strategic partners. This is especially critical in those environments where there is a steadily increasing reliance on outsourcing, as it forces an outward looking view of the world that traditional technology-based approaches rarely consider let alone pursue. This is one of the main reasons that initiatives in which change or compliance management is a core element fail 85% of the time.

Or as Cisco's Senior Director, Supply Chain Management K.C. Wu put it in the same article, "the challenging piece," is linked to understanding "the kind of interaction you want to resolve with customers and with supply chain partners."

"Maintaining alignment with those partners depends on standardized processes rather than prescriptive directives such as, for example, directing your CM to use a specific system."

(Cisco has certainly come a long way from the days of their over-reliance on technology. As you may recall, Cisco's strict adherence to the recommendations of their APS software in the late 90's had them increase overall production just as the market was heading into a tailspin as a result of the dot com implosion. The catastrophic results included mass layoffs and the significant write-down of excess inventory costing the company millions of dollars.)

And while recognizing the tremendous potential associated with "standards-based partner interfaces," Ms. Wu stressed that "implementing such interfaces, however, requires a sharing of common goals, common processes and common vision." Note the absence of a reference to common technologies.

This speaks volumes in terms of the heralded introduction of Service Oriented Architectures as the driving impetus toward what Larry Ellison referred to as the "near real-time" collaboration between disparate systems. In truth, technology (such as Oracle's as well as other traditional equation-based offerings) that is designed outside of the framework of adaptive or what I have on previous postings referred to as an agent-based model will never be able to reliably establish the streams of commonality that are driven and defined by real-world processes.

#### [Visibility with a single source of truth](#)

While not wanting to ignore the other notable insights from the Mendez interview, (you will certainly want to read it in its entirety), Ms. Wu's other comments warrant further discussion. For example, her position surrounding New Product Introduction (NPI) in which she emphasized that to be truly effective, "we must design for source, fulfillment and delivery in parallel to achieve Cost/Quality/Delivery goals," stands out in terms of the synchronization of Cisco's supply practice. And at the heart of this synchronization is the visibility across the entire network that leads to a "single source of truth."

In an excerpt from a paper I wrote in the fall of 2004 titled Acres of Diamonds (to my regular readers you are no doubt more than familiar with the Acres paper), I made the following statement:

"It is my position that a true centralization of procurement objectives requires a decentralized architecture that is based on the real-world operating attributes of all transactional stakeholders starting at the local or regional level. In other words, your organization gains control of its spend environment by relinquishing centralized functional control in favor of operational efficiencies on the front lines. This is the cornerstone of agent-based modeling."

As time progresses the ability to more effectively link an observation such as the one made above, to a definable, real-world example – in essence to provide it with some current day relevancy, becomes somewhat easier.

In Cisco's case, their management system called Autotest is an indication of how the original concept from the 2004 paper seems to have evolved into a real-world practical application.

According to the article, Autotest "captures real-time data from facilities – globally disparate manufacturers with disparate operating systems – to provide a one window view of the state of global production lines." Certainly sounds like the elemental roots of a Metaprise-based application or Meta-enterprise as it was referenced by Mohabir Sawhney and Jeff Zabin in their book *Seven Steps to Nirvana: Strategic Insights into eBusiness Transformation*.

The Shister article went on to say that Autotest has "intelligent agents built into the system," that "can even trigger corrective actions long-distance when required." If not in reality at least conceptually the intelligent agents to which Jim Miller, Cisco's Vice President of Advanced Manufacturing Technology is referring, possess some advanced algorithm characteristics.

Keeping in mind that I have not had the opportunity to see the Autotest application first-hand, nor do I believe that it represents the first nor most advanced foray into the realm of agent-based, meta-enterprise applications, Cisco's application is nonetheless impressive in that it is likely one of the first of its kind to emerge from mainstream corporate America.

[Where do you go from here?](#)

Once again, I want emphasize the fact that whatever gains or improvements Cisco has made over the past few years, they almost certainly began with a evolution in attitude that can best be reflected by Jim Miller's statement regarding the importance of getting people "out of functional silos and thinking holistically."

A "holistic" approach translates into an effective strategy to engage and understand the objectives of key stakeholders across the entire enterprise and beyond - (for those of you who have not yet attended my seminars what

I am talking about relates to the building of an effective Results Objective Table).

When this mindset is extended to include other key areas of your supply practice such as domestic and international cluster development, your organization will be on the road to laying a solid foundation to effectively survive and thrive in an increasingly globalized market.