Motivating Supply Risk…
Managing Supply Variability in the High Technology Industry

The high technology industry has one of the most complex, elongated and geographically diverse supply chains, with products often traveling across multiple international borders all before their first end-customer shipment. The impact of disruption and variability in either supply or demand can have a range of negative effects on the enterprise. Those with proper plans and tools in place can often absorb the disruption, while others less well prepared can incur large expenses or customer dissatisfaction.

Supply Risk
In recent years, many situations have reared their head that have had significant impact on the supply chain. Following the financial meltdown in 2008, supplier financial viability and stability issues arose; more recent causes such as the 2010 volcano eruption that shut down airfreight all over EMEA, labor disruptions in China in 2010, to 2011 blizzards and two recent devastating earth quake catastrophes. While some of these events are very tragic, companies need to be prepared to minimize any impact they would incur that can lead to significant lost revenue, customer dissatisfaction and major expenses.

Common and key dependency points can be a major source of risk and broadly disrupt supply in the value chain if your company is not properly prepared. While the impact can’t necessarily be fully avoided, minimizing the initial impact as well the challenges during recovery is the key. The overall event risk or threat can only be minimized with careful planning, processes, and tools that provide objective data to make the right decisions.

Event Challenges
Event-driven, limited and variable supply with low visibility is a worst nightmare situation for enterprise planners. Not only do they need to address the immediate impact, but they also must continue to maintain and adjust ongoing plans to adjust to changing conditions until things are back to status quo. This is in great contrast to the way many high tech enterprises do their current detailed sales and operations planning, with monthly major updates and adjustments.

Usual monthly planning processes are based on historic along with current demand, supply, and operations data that form the plan and combined with historical, company-based expertise to produce the optimized plan. This is in stark contrast to
when a large event and disruption occurs in the supply chain, and typical processes fail to provide the contingencies and response to overcome and minimize the event.

**Event-Driven Needs**
When a single event holds the potential to fully disrupt the products and services you sell, specific processes and capabilities are necessary to mitigate the impact and perform under the stressed conditions to create situation-based plans for your enterprise. The ideal key to success is an advanced contingency plan aligned with and created to handle the specific event. However, we all know that ideal situations are most often not the norm.

The next best outcome for your enterprise is to possess the ability to expeditiously conduct a properly modeled analysis of the situation utilizing enterprise risk and planning tools operating on your own enterprise data. These tools will help make the best decisions to minimize the disruption from the event. Your current plan or base data should remain untouched as each planner’s evaluation is run, until a decision is made to implement an execution change.

Only an enterprise tool that fully understands how the event changes the dependencies and resulting impact, through analysis of current plan data, can bring value to your event situation. Ongoing and continuous adjustments are often also needed until the event subsides and you are able to return to your standard planning process. This ongoing need is fueled by continued variability, and often limited visibility, during the recovery progress. As incremental changes are identified, the rapid planning system needs to be able to easily release changes into the execution systems. Resiliency is the outcome for a well prepared organization.

**Risk Mitigation Solution Capabilities**
A collection of risk management and optimization solutions along with fast planning tools that can work with legacy ERP systems are needed to help mitigate the broad risks you face. The most flexible approach would be to use open, SOA-based middleware helping integration in heterogeneous environments. This helps create the necessary business agility to improve your business resiliency to risk events. Key Oracle Capabilities you should look for:

**Oracle Crystal Ball** – Conduct predictive modeling, forecasting, simulation, and optimization to create unparalleled insight into the critical factors affecting risk, to enable the right tactical decisions to reach objectives when facing uncertain market conditions.

**Oracle Rapid Planning** – This fast, incremental planning engine combined with easy mass editing of data to instantly assess the impacts of changes without having to wait for daily tactical planning runs, combined with embedded analytics to provide predictive and actionable insight, and seamless integration to execution.

**Oracle Strategic Network Optimization** – Evaluate, optimize and design your entire supply network with agility in mind to support multi-geographic supply, multi-geographic distribution, and multi-geographic consumption.

**Create Peace of Mind**
In today’s complex high technology world, it is almost inevitable you will experience an event driven disruption in your supply chain that can significantly and negatively impact your enterprise and customers. Don’t wait; implement your comprehensive risk analysis and mitigation plans to put in place sound processes enabled by the right enterprise tools that let you minimize impact. They will reward you with the agility and resiliency needed to cope with the unexpected, letting you minimize customer impact and costs incurred.

**Contact Oracle**
For more information contact your local Oracle sales rep and ask to learn more about Oracle’s risk mitigation tools and suite of value chain planning and execution tools. Or, visit us at: www.oracle.com/goto/hightech.