

Catching up with a Pro

Risk Mitigation is Critical to Success in 2011

According to Don Lesem of IHS, volatility threatens everything from chemicals and trace minerals used in electronics to commodity prices and global trade flows in 2011.

By Andrew K. Reese

It's that time of year when, in addition to making (and breaking) New Year resolutions, we can't resist the urge to get caught up in "Top Predictions for 2011" from pundits and industry experts. In addition to being drawn into such musings, I often find myself digging up past editions of the magazine where we have asked our Pros to Know and Green Supply Chain Award winners to provide similar prognostications based on key supply chain disciplines in which they have expert insight.

I recently caught up with one such Pro to Know, Don Lesem, IHS Vice President, Product Lifecycle Global Products and Services. Don has purview over certain Supply Chain and Design capabilities at IHS, which includes the company's strong portfolio of electronics value chain solutions, such as the highly regarded technology research and advisory services that the company offers through its November 19, 2010, acquisition of iSuppli.

For our 2009 Pro to Know predictions, Lesem et al had this to offer the magazine:

"Insight into material substances used in products and processes is vital. A critical inflection point in manufacturing history was overshadowed by economic woes: An abrupt shift from traditional supply to regulated, "green" chemicals

and materials. Inventory is dangerously lean. When demand improves, it will be met with skepticism and conservative production. Companies must secure traditional supply, while competing for new eco-friendly materials. Winners will be those who avoid supply interruption, breeze over regulatory hurdles, and make the green transition before their peers."

As covered in the article "Risk in the Electronics Value Chain" (page 8), these predictions came true as 2010 witnessed major part shortages and constraints. Deeper, more quantitative validation from IHS shows the relationship with these shortages to economic recession and "green" environmental compliance. In speaking with Don, I reflected on these predictions and looked ahead to 2011.

AR: Don, as 2010 unfolded in the electronics value chain, it turned out you offered great advice. In retrospect, besides your obvious experience and understanding of the markets you serve, what more specifically did you base this 2010 prediction upon that ultimately resulted in it being quite accurate?

DL: Simply put, the assessment I made of the electronics value chain came from anecdotal and first-hand experience from IHS customers and colleagues worldwide. I also drew upon our own electronic component insight from IHS products



Don Lesem,
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and services, which validated my hypothesis.

It was apparent to our electronic component trend analyses that manufacturers upstream were in a severe reaction mode due to shortfall in demand and the economic downward spiral. When applied to dangerously lean inventory throughout a predominantly global, multi-tier electronics value chain, this suggested that a major divide would widen between those unprepared downstream entities severely impacted by shortages and those more prepared to use agility to their business advantage. In a sense, to the prepared, it wasn't a prediction, but a fact-based assessment of where the market was heading.

AR: Is the market still headed this way? Are manufacturers still in reaction mode?

DL: Yes and no. Obviously the economic climate has changed. We still see a significant number of cuts being

made to product lines, and the primary reason specified by manufacturers is still related to demand. To that end, they're still making moves to rationalize product lines or trim low performers. However, we can also see a shift from frontline product-focused behavior to facility closures and consolidation. This, combined with increases in fab utilization, can suggest the reactionary moment has subsided and we're seeing the trailing effects of closing that chapter in the economic recession in favor of a newer, healthier one.

AR: And what about the environmental compliance and regulatory angle? Is this behavior across the supply chain the same?

DL: This is another "yes and no" answer. Yes, we still see sustainability and environmental compliance issues causing unexpected volatility to otherwise stable, albeit variable supply and demand patterns. But no, it's not the same set of sustainability and compliance pressures. We continue to see material shortages, price increases, obsolete parts caused by RoHS, while the effects of EU REACH and its Substances of Very High (SVHC) like DEHP have materialized. Meanwhile, there's a whole host of new issues imposing change upon the supply chain.

AR: What other key issues do you see driving behavior in 2011?

DL: Two come to mind immediately. The first occurred when the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 was signed into law on July 21, 2010. It contains a six-page section formalizing plans to regulate the otherwise social issue of "conflict minerals" coming into the supply chain from the Democratic Republic of the Congo (DRC). The second is Kaiser Permanente's October 28, 2010, research announcement concluding, "Exposure to BPA Associated with Reduced Semen

Quality." Albeit the topic of BPA is still of much debate, this may be the definitive game-changing development to move the needle on regulating BPA, causing a much broader industry move from today's more isolated and voluntary approaches — things like baby bottles being BPA-free.

AR: Our readers have been extremely interested in our conflict minerals coverage [surrounding trade exploitation and human atrocities linked to minerals like tin, gold, tantalum, and tungsten sourced from the DRC]. IHS has stood out for not only immediately discussing this issue with our publication but also leading dialog and research within industry on this critical supply chain issue. So, first things first, why IHS? Meaning, what prompted IHS to so quickly react to this kind of development?

DL: That's easy: our customers. IHS has very publicly committed to delivering "customer delight" as one of our four measurable company goals. Every colleague at IHS is now measured on our ability to delight our customers. More specifically, our customers brought this DRC issue to our attention as a top concern, and we brought it to your readers. It's as simple as that.

AR: But why such focus coming from your global supply chain and design capabilities organization?

DL: This new regulation governs not only what materials go into products but also evidence of where minerals originate and the chain of custody as they pass through the supply chain. It adds some very unique capability requirements upon the supply chain. What's not unique, and is similar to environmental regulations like RoHS and REACH, is that there's a strong chance that formalizing concerns under this US legislation can force a similar "cause-and-effect" impact on supply and demand characteristics. We may see rising prices of metals as a result of US

or other global companies banning the use of minerals derived from this region as well as supply constraints resulting from manufacturers choosing to limit, or abandon altogether, products and processes using these materials. In all, besides potential disruptions from material shortages caused by production, margin, and allocation issues, it's plausible that rising lead times will incent electronic counterfeiters to prey upon companies competing for a diminishing pool of to-be-obsolete or constrained parts.

AR: So, what does the average reader do to take this 30,000-foot view and turn it into some tangible steps for enabling solutions and how these may lower their risk exposure?

DL: Specific to electronics value chains, in order to sense and respond to challenging market pressures, companies can utilize technology value chain research and advisory services, BOM and Lifecycle Management toolsets, and in-depth information on counterfeit, substandard and high-risk parts. To sum it all up, an increase in obsolescence as indicated by rising EOL notices as a KPI for material shortages eventual result show up as price and lead-time increases, of which rising lead-time itself is a KPI for increased counterfeit part activity. Meanwhile, across industries, insight into ocean routes and trade flows, commodity outlooks, and pricing indices can provide companies with macro-level, early warning signals to mitigate risk. These are all key things to keep a close eye on and IHS can obviously help our clients address each of them.

AR: So market turbulence and the subsequent need to mitigate supply chain risk is your prognostication for 2011?

DL: Yes, unless I can quit while I'm ahead? ■