## CREATION TECHNOLOGIES Steps up efforts to Reduce supply chain risk

To mitigate risk caused by supply base consolidation, the EMS provider has expanded its value analysis/value engineering services for OEMs.

## **By James Carbone** Global Purchasing, August 2016

Many industry analysts and suppliers say that consolidation in the electronics industry will result in a smaller, but stronger supply base that is better able to develop new technologies and products for OEM customers.

However, consolidation will also mean fewer supplier choices and more product obsolescence as merged companies eliminate redundancies in their product portfolios by ceasing production of similar parts. Fewer parts and fewer sources mean more risk in the supply base.

For EMS provider Creation Technologies, based in Burnaby, British Columbia, consolidation is both a challenge and an opportunity. Creation builds boards, subsystems, and systems for OEM customers in the communications, medical equipment, computer, defense and aerospace, and energy industries. It also offers new product introduction and rapid prototyping services to OEM customers.

"Consolidation goes hand-in-hand with technological and economic shifts and has been part of this industry for decades," said Charles Tonna, Vice President of Supply Chain and Operational Excellence for Creation. "It will remain that way for the foreseeable future, whether with raw-material suppliers, brand-owning suppliers, contract manufacturers, OEMs, etc."

Steve McEuen, Vice **President of Procurement** for Creation, said while consolidation is not new to the electronics industry, in recent years there has been a "massive number of semiconductor mergers and acquisitions." On the positive side, consolidation will result in "accelerated technology improvements" with certain semiconductors such as wireless ICs, power management chips, and processors used in Internet of Things applications, said McEuen. However, consolidation will also cause "shifts in pricing, distribution channel realignment, and product portfolio rationalization, which will drive an increased level of endof-life (EOL) notices," he said.

To mitigate risk caused by consolidation, Creation has expanded its value analysis and value engineering (VAVE) services for OEM customers. With value analysis and value engineering, each component of a board in a subsystem or system is evaluated to determine its total cost of acquisition for its maintenance and usage and if it is possible to replace the parts with a more cost-effective, alternative component.

McEuen said having in-house VAVE expertise is a competitive advantage for Creation because "we can offer our "Consolidation goes hand-in-hand with technological and economic shifts and has been part of this industry for decades," said Charles Tonna, Vice President of Supply Chain and Operational Excellence for Creation Technologies.

customers rapid solutions when we predict or encounter changes in the customer's approved vendor list (AVL) or when we experience supply pipeline challenges."

VAVE analysis helps OEM customers understand the "dynamics in the marketplace, the impact on their design, and provide recommendations and solutions to ensure their products have minimal risk exposure," he said.

Tonna said VAVE can help OEM customers identify opportunities to reduce risk at the point of design, prototyping, and new product introduction launch or in full-scale production.

For example, an OEM may be using or considering designing in some components that are single-sourced or may soon become obsolete. VAVE can identify the parts that are risky and Creation can suggest alternate components or possibly other suppliers for the part.

Creation has "close partnerships with both our customers and suppliers, which is the best way for us to make the right recommendations for alternative sourcing streams to prevent risk," said Tonna. He added that to

reduce obsolescence risk, Creation also has a "defined notification process with our supply partners." Such a process means that Creation gets early warning about when a component is about to go EOL and can advise OEM customers. Creation's commodity management teams and its design-services engineers provide recommendations to OEM customers to mitigate risk throughout the product lifecycle.

"Add to that things like last-time buy opportunities, customer agreements, and completing design for procurement and design for manufacturing on new products and new customer launches, and we're able to keep well abreast of the obsolescence challenge," said Tonna. "Creation partners with distributors and a significant amount of Creation's spend is through distributors including large and niche distributors," said Steve McEuen, Vice President of Procurement for Creation Technologies.

Obsolescence is not the only risk that Creation's commodity teams and engineers help OEM customers mitigate. "There are many different supply-chain risks," said McEuen. "There have been disastors such as the China port explosion

disasters such as the China port explosion and Japan earthquake, supplier quality failures, labor disruptions, lead time pushouts." Creation's commodity teams and engineers help OEM customers identify, plan for, and mitigate such risks.

Distributors play a role in maintaining risks by providing supply-chain market intelligence to Creation.

"Creation partners with distributors and a significant amount of Creation's

spend is through distributors including large and niche distributors," said McEuen. Distributors provide valuable services such as consolidated shipping, standard reporting structures, innovative inventory and quoting solutions, purchasing automation and electronic exchange of data.

Distributors also provide supply-chain intelligence to Creation, which is available to customers through the EMS provider's Vision Customer Portal. The portal displays real-time supply-chain visibility concerning an OEM's planning and supply chain data.

"The component and delivery data feeds from our distribution partners are a key part of that broader look our customers get of their supply chain," said McEuen.