

SUPPLY CHAIN INSIGHTS

PLUG-AND-PLAY SUPPLY CHAIN: TWO STRATEGIES FOR FUTURE- PROOFING HIGH TECH COMPANIES

By Lisa H. Harrington, president, lharrington group LLC and Senior Research Fellow, Robert H. Smith School of Business, University of Maryland.



All industries experience volatility, but none so severely as the high-tech sector. Particularly in component supply. Prices and availability can fluctuate wildly from one year to the next, affected by anything from natural disasters to blockbuster new products.

What steps can high-tech companies take to buffer against such high volatility? One solution lies in applying the tenets of a plug-and-play supply chain strategy. This emerging best practice revolves around standardizing as much of the supply chain as possible by creating flexible, easily replicated solutions and management practices, and rolling them out across the enterprise.

Standardization practices, such as risk management and supplier management, can help tech companies mitigate supply chain risk – and in doing so, save millions.

1. **Standardize risk management.**

For many companies, supply chain risk is approached in an ad hoc manner, with little or no standardization in process or execution across the enterprise. This laissez-faire strategy can backfire, though, with dire consequences.

Take the case of Hewlett-Packard (HP). In 2000, the company faced a supply crisis. Cell phone manufacturers – with booming sales – snapped up much of the global flash memory production. As a result, HP could not procure a critical component for its highly profitable printers. The company failed to ship about 250,000 printers – resulting in a revenue loss of tens of millions of dollars.¹

¹ "HP Invents New Framework for Managing Supply Chain Risk." <http://www.supplychainbrain.com/content/research-analysis/supply-chain-innovation-awards/single-article-page/article/hp-invents-new-framework-for-managing-supply-chain-risk-1/>. Supply Chain Brain. 2017, 1.

Management realized the company had to do a better job of managing supply chain risk, especially in procurement. The company developed a systematized procurement risk management process – called the Procurement Risk Management (PRM) framework. PRM is designed to manage risk for three critical variables: price, demand and availability/supply.²

To support this effort, HP created a risk assessment software tool that assigns a probability rating based on calculated level of uncertainty. HP uses these scores to develop a portfolio of procurement contracts designed to share risk with suppliers in a standardized manner. HP assumes the risks it can bear more affordably, and asks suppliers to shoulder risks that they can more easily manage.³

HP now applies this strategy to about \$6 billion of spend annually across numerous business units. The results are impressive. The company has saved more than \$100 million thus far.

2. Adopt a “business collective” strategy for supplier management.

Beyond just managing risk with their suppliers, best-in-class tech companies embrace a “business collective” strategy in their supplier relationships, whereby all parties collaborate to reap shared benefits.

The idea behind this strategy is simple. Multiple organizations meld together to face the market as one single commercial entity. They eliminate the barriers that traditionally separated not just internal departments, but external partners up and down the supply chain. They align on a shared mission and competitive strategy; and work together to capitalize on their strengths and overcome weaknesses.

Under the business collective approach, tech companies and their suppliers create standardized supply chain processes that are based on the following elements:

- A standardized and mutually agreed upon relationship management structure to ensure that all relationships stay healthy and vibrant
- Mutually agreed upon goals and objectives, segmented to customers, products, markets, lanes and other criteria
- A platform for problem resolution
- A framework for standardizing operating processes to eliminate waste and improve agility for all parties
- A platform for establishing and realizing performance measurement objectives.

Systematizing these processes takes the guess work out of managing supplier relationships. The result is consistency across the enterprise, and better supply chain performance.

A powerful hedge

Deploying a plug-and-play strategy to risk and supplier management serves as a powerful hedge against uncertainty and volatility. In an industry sector that struggles with uncertainty on a massive scale, such a hedge can be a competitive differentiator.

² Ibid.

³ Ibid.