New Studies Show Common Weakness in Supply Chain Management

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Two recent studies have pointed to common weaknesses in supply chains that many companies probably think are very tight and efficient. Concentra, a company that specializes in improving the supply chains of different companies, found that businesses often carry 40 percent more stock than necessary because of overall inefficiencies in the way managers understand their own supply and demand, according to Digital Supply Chain. The CBOE Volatility Index (VIX), used by the Chicago Board Options Exchange to predict market volatility, dipped recently, according to Manufacturing.net. While this may not seem like much, it points to the need for a highly reactive and predictive supply chain. In the same way a company predicts the price of steel, it needs to predict how many units of a product the market will absorb in the near future.

Evidently, according to the first study, companies cannot do this with very good accuracy. A third story, about the holiday season, points to the discrepancies to be found in demand during that time. For example, L.L. Bean was unable to predict the popularity of its snow boots, according to ZD Net. Furthermore, now that the boot

is so popular, the company cannot so easily begin to ramp up its production of this item.

So what can companies do if they are making these bad guesses about inventory and unable to predict the future?

Using Data Capture to Accurately Record Inventory in Order to Plan Ahead
Ultimately it comes down to using the lagging indicators, such as what is inside a factory already based on previous guesses, in order to prepare for the leading indicators like holiday predictions. The study in Supply Chain Digital would seem to indicate that people are making estimations of what to make every month based upon gut feelings and crude estimations rather than hard data.

"Maintaining transparency across the supply chain is key to long-term success," said, Andy Birtwistle, director of supply chain practice at Concentra. "With the supply chain projected to be worth over £30 billion to the UK economy by 2025, increasing efficiencies and cost saving could make the difference between being an also-ran and a market leader."

How a Can Company Improve its Transparency
It really comes down to the technology that has been available for a long time but still isn't in common enough usage and has actually become much more advanced since many managers have last seen it: data capture through barcode reader software and radio frequency identification. It's as simple as using a machine to scan the barcodes on raw materials when they come into a factory and scanning them again each time the item moves to another room and gets further built up into a finished good. By the time items leave the factory, a huge amount of data about efficiencies having to do with procedures have already been discovered. Managers will now know exactly, down to every single piece of finished goods, how long it took for each one to leave each segment of the manufacturing process and end up on a truck going to a warehouse.

Items are scanned again at the warehouse. From here, it's a matter of making educated guesses based on previous years of experience. When it comes to things that happen out of the blue, such as the sudden popularity of L.L. Beans snow shoes, companies can at least guess how long it would take to make a thousand more shoes because they have already run those numbers through data capture.

By looking at previous waxing and waning of the popularity of items, companies can also look at what is still in a warehouse and make an estimation about how much to make based on those numbers, as well. It all leads back to having a very transparent window in the manufacturing process and into the warehouses themselves.