How Demand Planning can Improve the Supply Chain

Good demand planning enhances profitability – if it is executed appropriately.

The success of a supply chain is often linked to its efficiency, which can be traced back to the ability of managers to conduct accurate forecasting when it comes revenue and inventory. Those two facets of a business are tied to a crucial process in the world of supply chain: demand planning.

Demand planning uses analytics that examine historical sales data, customer orders, shipments, current sales and market indicators to better predict demand patterns based on market changes, enabling firms to make smart decisions about inventory and production levels.

Good demand planning is highly accurate, based on data and enhances profitability. But the process can be tedious, time consuming and easy to mess up. One area of a supply chain, such as procurement, may improve its ability to forecast future demand, but logistics and manufacturing may lag behind, leading to higher levels of inventory and escalating costs.

Getting each player in the supply chain on board with demand planning is often difficult, but it's far from the only hurdle. Examining the correct data is one of the biggest challenges, as the information must be run through a number of filters, such as high variance in the last six months, frequent zero demand periods, month-over-month demand history, frequent shortages and statistical forecasts.

Without proper demand planning, supply chains wind up dealing with production delays, inventory surpluses and strained relationships across the various disciplines that make up an organization. Avoiding such problems would call for professionals that possess two important skill sets:

- Applying the data to the company's business model

- Communicating what the data means to departments across a given company, such as marketing, sales, executive teams, distribution or manufacturing

A common way to achieve collaboration across functions is through the implementation of a centralized demand planner for all groups to report their respective data. The challenge for this centralized cross-functional analytics group is to understand the needs of the various departments and how consumer behaviors drive demand.

Modern supply chains are global and complex, often comprised of regional teams relaying information to demand planners and teams at the corporate level that are also gathering data from a global perspective. The two have to work together in order to plan globally while executing regionally.

How to See into the Future

Traditionally, supply chains are more reactive than proactive. In today's market, the ability of your supply chain to adapt to demand changes is more complicated than responding to latent order data. The reactive model does not work for demand volatility, which is on the rise in the current market. Consumers' wants and needs shift faster in the modern marketplace and supply chains that cannot shift with them will struggle to survive.

Successful supply chains are able to adapt by eliminating bias and building systems that can sense and respond to demand volatility. Such a system needs to be designed from the outside-in and include sensing channel demand, using optimization to actively shape demand and applying advanced analytics to drive an intelligent response, according to Lora Cecere, founder and CEO of Supply Chain Insights.

Here are some of the important to-dos in overhauling the demand planning process.

- **Get the right software** – There are a plethora of options when it comes to enterprise resource planning (ERP) systems, but choosing the right one can be tricky. In looking at ERP software, it's important to examine the ability of the tool to handle forecasting nuances as well as the provider's reputation, reporting capabilities, and the transparency and reliability of the forecasts it produces.
- **Track the right metrics and use the right data** – Metrics need to reduce error and paint a clearer picture, while data needs to simply identify areas where improvement is needed and drive accountability.
- **Define process models** – Lacking a defined process for a demand planning cycle leads to chaos. Confusing process with information that is simply a set of widely known facts around an organization is all too common, making it difficult to hold anyone accountable and thus hurting overall performance. For most top supply chain companies, the demand planning process goes something like: preparation of data, initial forecasting, incorporation of market intelligence, meet with sales and finance teams to reconcile bottom-up forecasts with top-down finances and sales forecasts, refine a final forecast and finally, performance monitoring.
- **Careful implementation** – Successful demand planners usually design a pilot version of the plan using historical data as a basis. They also make regular adjustments and have a team of people dedicated solely to the devising the plan, implementing it, reducing error and bias, and designing processes for execution.