



INTERVIEW

Joe Andraski Discusses Collaborative Planning, Forecasting and Replenishment with Larry Smith of West Marine

Joe Andraski: West Marine is conducting CPFR programs with its top suppliers that we can truly say are accomplishing all the nine steps in the CPFR process map. The West Marine program also provides a clear solution to the difficulty many CPFR participants have had in developing the scale of their CPFR initiatives, both in the number of partners and the number of products involved. We will hear how Larry Smith and West Marine are addressing Collaborative Planning, Collaborative Forecasting, and Collaborative Replenishment, all three of the major activities in the CPFR framework. Certainly a driving element in the West Marine approach is the assumption that getting to collaborative order forecasting is the crux of CPFR.

Joe Andraski: What does CPFR mean to you?

Larry Smith: Collaborative planning, forecasting and replenishment is a key strategy for achieving supply chain excellence. I'd like to complement all of the attendees this afternoon for bearing up during a full day of challenging presentations. For the West Coasters among you, it's now the cocktail hour, and for the East Coasters, we're well into the after dinner part of the evening, so your attention during this session identifies you as certainly very committed supply chain people.

Not all great companies have as a key part of their core ideology a commitment to serving customers, but some of those uniquely committed to customer service have been able to translate this core value into superior supply chain performance. Wal-Mart is a great example of this, and so is Dell. We think that West Marine can also be placed in this group. Here are two striking examples of West Marine's commitment to collaborating with its supply chain partners. A few weeks ago, we invited the heads of firms or divisions of our top 20 strategic partners to a two-day facilitated session, the result of which was that the individuals present and their organizations committed to a breakthrough partnership for success for them and West Marine. That we would put together such a top-to-top meeting, and the initiatives flowing from it, clearly indicates West Marine's organizational commitment to collaboration. A second example is our growing program of embedded associates from key suppliers, who have offices within merchandising at the West Marine Support Center.

Four years ago, when I interviewed at West Marine, I suggested to members of the executive team that we could drive the enterprise from the replenishment forecast. Normally this would have been a ticket to a short interview, because the usual view of

senior retailers is that replenishment forecasts are faulty. I received a different response from the West Marine senior team. The response went something like this: “Of course the replenishment forecast should be correct, and, by the way, why isn’t it?” Recognizing this openness to using planning and forecasting as fundamental components of business execution went a long way toward convincing me to join the West Marine team.

West Marine’s business model presents significant planning challenges. The model includes a broad item and supplier base. The business is both highly seasonal and promotional, both of which cause difficult compressions in the supply chain. To the degree possible, we wanted to include all our demand and ordering insight in both our sales forecasts and in our forecasts of future orders to suppliers. We committed that all promotions and assortment changes would be included in our forecasts far enough in advance to cover our suppliers’ materials planning requirements. As a multi-channel retailer, we needed to forecast direct sales to catalog, Internet, and commercial customers in “virtual” replenishing stores. We also discovered that our stores sold items acquired for customers from our warehouses that were not replenishing at stores. These “non-stocking” item sales accounted for around 10% of total sales, and the penetration of these sales in certain items and categories exceeded 50%. So, we built a complete system around forecasting these sales and rebuilding the process monthly to stay current with changing store assortments.

We also developed an entire system around ranking items and service levels. Most businesses determine varying levels of safety stocks for items of different importance. Often these determinations are ad hoc, and remain with items during their entire life cycles. Our approach establishes new rankings and service levels each week based upon the forecasts for the next 13 weeks. Stores in different markets have differently ranked items, and they change seasonally, reflecting the “personality” of each store. Here is a good example of the organization’s “buy in” to this process: the team defining a new small store prototype naturally turned to the item ranking information in establishing the assortments appropriate to the new prototype stores.

West Marine has planned for accurate forecasting. We’ve built new solutions to support this effort. But our most important guide to accurate forecasting remains a stable and practical approach to the business. For example, we have chosen to stay the course in the aftermath of the business shocks of the past few years: a stock market bubble bursting, economic downturn, war, or a terrorist attack. These events affected our current results just as they did other retailers. We had the courage and commitment to expect our customers to return quickly to their favored leisure activity that was also usually a source of their best times with family and friends. We knew we had to be ready for them each spring.

Joe Andraski: How important is the role of order forecasting in overall collaboration?

Larry Smith: Forecasting is only one of the three key activities in CPFR. Planning is the process of working together to organize and to resolve key barriers to rapid and efficient delivery of goods in the supply chain. Replenishment is the activity of accomplishing timely, accurate and complete fulfillment between partners in the supply chain and between distribution centers and selling locations. The middle activity, Forecasting, has to have as its end result a reliable order forecast that the supplier actually uses to drive acquisition and manufacturing to support on time and complete shipping. Many companies have spent a lot of effort on collaborative forecasting, but few are addressing order forecasting. Those partners that are not arriving at an order forecast actually used by the supplier are not getting at the heart of the matter.

Joe Andraski: Without order forecasting, how is CPFR improving fulfillment?

Larry Smith: A lot of good work is going on in current CPFR engagements, and focus and information sharing are providing significant results in select partner performance. Prior to ECR and CPFR, few consumer goods firms were having much success with attempting to forecast customer orders based upon trending actual order experience. They found actual orders were clearly much more variable and unpredictable than customer take away. Some CG firms have actually had the best success building to consumer sales while ignoring the trend of their retailer's orders. Within focused CPFR engagements, partners share timely information about upcoming events that affect ordering outcomes, including promotions, rollouts, and other assortment changes. This enables the supplier to prepare for these events. But since this information is not organized in a discrete order forecast shared between the partners, it has been difficult to move beyond select focused engagements to achieve scale in CPFR. Many of the CPFR-specific software options also do not really enable achieving large-scale implementations of collaborative forecasting. To some degree, the focus on exceptions and forecast reconciliation, while well intentioned, may also have diverted our attention from the goal: scalable accurate order forecasts that suppliers can use to improve fulfillment, lower inventory, and reduce logistics costs. Many companies are now asking why they have not been able to expand their CPFR engagements more rapidly and have a more significant impact on total enterprise results.

Joe Andraski: How do you believe CPFR can become more scalable?

Larry Smith: The CPFR model is an encompassing framework, and the VICS CPFR Committee has provided guidance on multiple approaches to collaboration. West Marine is an unabashed proponent of what is called Scenario A in the CPFR model: where the supply chain hub, in our industry the retailer, owns the primary responsibility for the forecast. We focused on getting our buyer-driven forecasts and processes in line before reaching out to suppliers. Our position has been that there needed to be a reference forecast at the outset, and it's the buyer that has to own that. The key reasons to focus on the buyer-driven forecast are that 1) the buyer usually drives the key events that crack the "bullwhip" in the supply chain; i.e., promotions and assortment changes, and 2) the buyer-driven forecast depends on only one technological platform and is therefore scalable across many items and suppliers with similarly accurate results. Based on this approach we have extended our CPFR program to 200 suppliers and over 20,000 items.

Joe Andraski: From your perspective, what is the state of supporting technology for order forecasting?

Larry Smith: The success West Marine has had in building a technology and business process platform to support accurate order forecasting is a clarion call to the retail industry that this goal can be achieved with available solutions. We are running an aggregate ordering process based on JDA's Advanced Store and Warehouse Replenishment software and developed in part by Amigo, Inc, a San Francisco-based system integrator. We are also using JDA's Intellect profiling solution, and we conduct a lot of our forecast accuracy analysis within JDA's Arthur Planning solution, which is populated with all our sales and order forecast information. 97% to 98% of items at West Marine are managed through automatic forecasting and replenishment, and we conduct our entire process from POS updating to supplier order forecasting each night.

Our process results in item order forecasts by distribution center by week for a year. So we can say that there is at least one set of available solutions, and the core JDA solutions we are referring to have a significant installed base. Unfortunately, outside of the JDA-E3 replenishment solutions we know of no other offerings that support robust order forecasts. Most of the large retailers are running the i2-IBM-Infocore replenishment solution, which does not support order forecasting.

Joe Andraski: How have you structured your business process to support CPFR?

Larry Smith: West Marine is very clearly committed to business processes that support accurate order forecasting. We have not created separate teams to support CPFR relationships. Instead, we have made CPFR and order forecasting integral to our merchandising and planning operations. Each West Marine Category Manager is partnered with a Merchandise Planner, and while the CM is responsible for the vendor strategies and marketing relationships, the MP is responsible for directing the supply chain relationship. Our forecasting technology allows us to plan assortment changes, rollouts, and promotions as far ahead as a year. This allows us to plan these events with reference to the materials planning horizons of any supplier and supply chain. We conduct quarterly supply chain planning meetings with each CPFR supplier that involve extended teams from both companies and include the key marketing, forecasting, production planning, distribution and transportation players. Monthly, the planners from both sides conduct a collaborative meeting that reviews results, manages current initiatives, and identifies and resolves any supply issues based upon the order forecast. Team members beyond the primary planners frequently attend and contribute to these monthly meetings as well. Twice a year, we host invitation-only Supply Chain Summit Conferences in Watsonville to jumpstart suppliers in the program or to bring new players from existing CPFR suppliers rapidly up to speed. Two Directors of Planning support the seven Merchandise Planners, who are responsible to improve the fulfillment performance of suppliers through this collaborative process.

Joe Andraski: What experience has West Marine had in measuring order forecast accuracy?

Larry Smith: West Marine has over two years experience in sharing order forecasting and measuring the accuracy of those forecasts over the materials requirements planning horizons of our suppliers. We are achieving consistent accuracy greater than 85% for shorter and longer lead times. In my address at the Retail Systems 2003/VICS Collaborative Commerce Conference and Exposition, I made this analogy: measuring order forecast accuracy is a little like measuring cholesterol levels. There is both 'good' cholesterol and 'bad' cholesterol. The 'good' cholesterol is variance to forecast that is due to large economic order quantities in a DC-to-DC ordering situation. We and our suppliers, of course, save millions in logistics expense by buying in larger economic increments. The 'bad' cholesterol is variance to forecast that is due to promotions or assortment changes not being reflected in the order forecast.

The 85 percent accuracy score answers the following question: of the items that we actually purchased, how many of them had we forecasted that we would purchase within the relevant time horizon. Many of our suppliers are interested in finished goods manufacturing lead times of 8 to 12 weeks. Our experience is that in the typical finished goods manufacturing lead-time we have forecasted to purchase many items once, but some of these items we actually purchase twice, blowing the forecast for each of those twice-bought items by 100 percent. It doesn't take many of these occurrences to drive the overall accuracy score down below 90 percent. We also observe that in these cases

the longer-term order forecasts for these items have not changed, we have simply purchased further into the time supply of the forecast for those items in the near term.

The supplier's safety stocks often allow them to fulfill the additional demand on these items, and this level of order forecast accuracy still enables the supplier to achieve our standard of greater than 90% of the order shipped on time in a single shipment. This season, many West Marine CPFR suppliers exceeded this goal. West Marine suppliers as a group, over 1,000 suppliers, were averaging about 30% initial on time shipping prior to our CPFR program. This year they averaged about 50%. We expect to have the CPFR suppliers averaging 90% within two years, and all suppliers averaging 90% within three years.

We also measure another related forecast statistic: of the items that we forecasted to buy, how many of them did we actually buy during the relevant time period. The answer is 98 percent to 100 percent with extraordinary consistency. Because of this, we have guaranteed our order forecast to all 200 collaborating partners, without restriction.

Joe Andraski: How are your suppliers actually using the order forecasts?

Larry Smith: We require all CPFR suppliers to review the forecast and identify any future shortages based on the forecast in each monthly collaborative meeting. We encourage all suppliers who have the capability of loading the forecast into their forecasting and production planning systems to do so weekly. We separately identify to each supplier key promotional items and which specific promotional events are included within each forecast. Some suppliers, based upon our penetration of their business, have actually elected to forecast all their production based upon the West Marine forecast. At the other end of the spectrum, we have some suppliers who manually review the forecast in comparison with their production planning reports. We believe our process suits a wide range of supplier capabilities and allows each supplier to pursue process and technology enhancements that can streamline their production planning and provide superior fulfillment and efficiencies.

Joe Andraski: Do you believe order forecasting levels degrade over time?

Larry Smith: Our experience leads us to differ with the assertion that the accuracy of order forecasting degrades over time. Our automated approaches to validating replenishment forecasting and business forecasting, the base forecasts, the effects of assortment changes, and the impact of promotions, result in similar accuracy results over extended time horizons. The key, however, is the commitment of the teams to plan these events further in advance to insure fulfillment.

Joe Andraski: With so many items and suppliers in your CPFR program, how can you keep up with all the information requirements of collaboration on this scale?

Larry Smith: When we began this project over three years ago, we included EDI and Electronic Catalog in our vision. West Marine selected SPS Commerce as its EDI and Electronic Catalog enablement partner. Advance Ship Notices allow us to measure shipping performance accurately, and the Electronic Catalog is allowing us to achieve improved data synchronization and expand the number of items we offer to include the entire marine supply assortment of our top 500 suppliers, which are also all EDI partners. We support collaborative communication with the following solutions: 1) a weekly automated email containing key instock and late shipping information for all members of each collaborative team, 2) a weekly automated email containing a spreadsheet version

of the order forecast for the members of the collaborative team responsible for forecasting, and 3) a monthly automated email providing audit level detail and performance measurement of each supplier's shipping for all members of each collaborative team. In the near future we plan to launch web-enabled content and workflow management tools to enhance collaborative meetings, and real time supplier inventory visibility with a select group of suppliers.

Joe Andraski: Do you think a scalable CPFR solution can lead to a sustainable competitive advantage?

Larry Smith: We would not want to be competing with a business that had implemented the technology and business processes West Marine has developed in the past three years, especially if that core competency was also accompanied by clear leadership positions in merchandising, marketing, store operations, distribution and transportation. We have demonstrated strengths in each of those areas. The question for other retailers and their suppliers is this: what if your primary retail competitor implements a buyer-driven collaboration process and significantly improves enterprise results?