

Big Is Beautiful at Panasonic

The consumer electronics giant is betting on large-screen plasma TVs as the display technology of the future.

In February, *Supply Chain Leader* interviewed Mike Aguilar, Panasonic's Senior Vice President of Supply Chain Strategic Initiatives. Aguilar has been with Panasonic for 29 years, recently moving into this position after leading the company's North American sales operations for five years. The consumer electronics division of Panasonic is preparing for the conversion to the digital spectrum by the United States in February 2009. The question is, how fast and how big will the spike be in sales of high-definition products and which technology will win? To answer present demand and build for more, Panasonic is opening its fourth plasma display plant in Amagasaki, Japan. Once it is fully operational (expected in 2007), Panasonic will become the largest plasma manufacturer in the world. The company commands the largest market share today (hovering at 50 percent) of a market expected to reach 10 million units by 2009. Plasma TVs currently account for 90 percent of the global demand for flat-panel TVs in sizes above 37 inches.

Why were you interested in moving from sales into supply chain management at Panasonic?

I wasn't. Our chairman, Yoshi Yamada, asked that I make the move, and I finally saw the wisdom in it. Panasonic wants to maintain its market lead in plasma display sales and that will require changing the basic business paradigm between us and our channel partners. Mr. Yamada thought that someone with a good sales background would understand what the channel partner and the end-consumer need. He understands that the consumer doesn't care so much about the technology as the solution: Is the picture quality good? Can the user show home movies and still photographs on the screen? Is the audio quality good? Mr. Yamada wanted to change the marketplace, to enhance demand for larger screen displays, a high-ticket item.

Why is Panasonic betting on large-screen plasma display technology?

We believe it provides the best quality picture and delivers a superior overall visual experience compared with other formats. It's also a core technology at Panasonic—one we've been investing in and developing for many years. We're the leaders in developing high-definition plasma display technologies in all large screen sizes, including the world's largest plasma at 103 inches! We want to take advantage of our lead in this area and make the most of trends we are seeing in the marketplace for more at-home enjoyment of the "big picture" phenomenon.

It's actually an interesting phenomenon. If you look back at the TV business five years ago, you would have been hard-pressed to sell anyone a TV over \$500 in value. And the largest screen was 36 inches. But, because people have seen the high-definition signal in malls and stores (and recently, the broadcast of the Winter Olympics in Torino, Italy in high definition), and experienced the higher quality, most are trying to get the largest screen that can fit in their homes. And prices have been falling, so that has also spurred interest.



What's at the root of the fascination with big-screen displays?

Mainly, it's the experience. It's much more exciting—mesmerizing, actually—to see a sports program or a movie on a large screen with high-definition resolution and color.

It's interesting to look at the statistics on movie ticket sales in the past few years, too. They've been down, and you have to ask yourself why. I don't think it's because of the content. There are simply more people trying to duplicate the movie-theater experience at home and waiting until after the release of new movies to buy the DVD. Or they're watching through their cable or satellite company. While they're watching at home, they want to have a similar experience to what they see and hear in the theater. For that they need surround sound. So we're designing home theater audio systems to go with the plasma display screens. In fact, when we look at this business we don't just look at it as a TV business. We look at it in three categories: the TV business, the DVD player/recorder business and the digital, still-camera business. Like the cable and satellite suppliers, these last two categories are really going to be providing the content for home entertainment.

The phenomenon has accelerated the furniture, shelving and wall-mount businesses too, since the big screens become the focal point in a room and have to be designed into the room either with cabinetry, designated spaces or hanging fixtures. And, of course, once consumers can't receive the digital spectrum on their old, analog-signal TVs, they'll need to have a converter box to use their sets at all. That will also spur a new category in consumer electronics.

Lastly, there are many competitors on the scene. Up until the last couple of years the computer manufacturers didn't take up space in this category, but obviously there are two ways to look at this convergence of technologies. One is that the home will be computer-centric and the other is that the home will be display-centric and have add-on appliances to that display technology. Nobody knows who the winner is going to be. Obviously, we're betting on the display-centric scenario with moveable media.

What is the magnitude of the phenomenon of high-definition plasma TVs, in consumer electronics terms?

We've never seen this monstrous spike in a new category. Not with VCRs or CDs or DVDs. The amount of growth and the rapidity of growth in high-definition TV technologies and displays can't even be compared with that of other categories.



In HDTV plasma technology, we have a category similar to the computer industry in its price deterioration, except at a much more rapid pace. In this three-year-old category, we're going through 30–40 percent price deterioration every year. And it's a price deterioration based on products that have an average retail price of \$5,000. We're also entering a market that is going to replace all of the traditional tube TV business that the average consumer has in his home today. So we're going into a new territory. The price deterioration is the result of the extreme competition in this area—among companies and technologies (liquid crystal display versus plasma, for example).

The curve of adoption of this new technology is also interesting. Formerly, in consumer electronics, you would introduce a new technology in a “boutique” channel: A high-end TV or audio system would start in a specialty store once the concept was established and had caught some momentum. And then it would move into electronics specialty stores and, finally, mass merchants. There was a lot of cycle time required to develop and improve the product because you'd start at the high end and then reintroduce new products at lower prices.

Today, that curve has been totally eliminated. Consumers want new technology immediately, and they want it in any channel they choose to buy it in, whether a warehouse club, a Wal-Mart, a Best Buy or a Tweeter. →

What are the problems this demand has created for the supply chain?

There's no longer the luxury of taking a long development time in a product cycle; the product cycle has to be married to a huge vertical launch, all at the same time with a massive amount of retailers. So the supply chain has become extremely important in ensuring that all of the retailers can supply all of the potential consumers at the same time.

Because of the size and vulnerability of the plasma screens, there are also special problems associated with packing, moving and storage. Plasma screens take up a lot of room on trucks and in warehouses. You can only fit 150 screens in a 53-foot semi, for example. For that reason, retailers were stocking small volumes, and with the spikes in demand of the past year or so, that has been a problem. Because these are high-priced items, it became obvious to us that for forecasting and planning purposes we needed to have closer knowledge of demand signals at the point of sale (POS).

So we've had to transition from being a "sell-in" company to being a "sell-through" company. The real sale doesn't take place when we sell "in" to our retailers; it occurs when the retailer sells "through" to its customers. We needed to become much more cognizant of what the retailers own and to look at end-to-end supply, which we never did earlier.

How are you getting at that information you need—the data from the consumer end?

Our traditional methodology was to collect POS information from our retailers once a week. And we collected it on a national level. But to really understand what is happening in the market, we've had to switch to once a day and to gather data from each individual store. So, in the case of our largest retail partners, we are collecting information from thousands of stores every day. This is a huge amount of information to process, and it is regional and local-store information, allowing us to adjust our marketing and promotions at that granular level.

The result is that the channels have had to change the way they do business with us. We asked them to make a large investment in their IT infrastructure to share POS information with us. Traditionally, we had a buy/sell relationship with the retailers, and then it evolved into a collaborative planning, forecasting and replenishment (CPFR) relationship. But we have now taken that a step further and asked our retailers to let us help choose what merchandise to put into their distribution centers on a weekly basis.

Why do you think you can do this better than your retailers can?

Ah, that's a good question. The short answer is that we are looking at the data more carefully and with more precision than they can, because we have engaged in a partnership with i2 Technologies to do so. Let me explain. When we took on the project of shifting our emphasis from supply to demand and shifting our forecasting to a POS forecasting system, we had two choices. We could go through the traditional process of buying software and installing it inside our company. (This would be a very



long process—up to two years—and it would entail hiring many more forecasting analysts than we have on staff.) If we had chosen this route, we would have missed a huge part of the growth curve that's taking place right now.

The second choice was to have i2, which has extensive software development and consulting services in India, perform the data capture and analysis for us. We decided to “rent” both the software and i2's expertise in forecasting analysis. We made several trips to India and were able to get this project going in just a few months rather than a few years. Essentially, just as we are embedding ourselves in our channel partners' supply chain operations, we are embedding i2 into our forecasting operations. We look at this as a kind of insourcing.

The partnership is really among Panasonic Japan, Panasonic USA, and i2 Technologies and is working out well because of the advantages created by the time differences. We're essentially cutting out a day from our forecasting process, because although our channel partners' weeks end on either Friday or Saturday, the information is in India on Sunday (their Monday). They work on it all day and deliver it to our desktops on our Monday. In this way, we're able to operate 24/7.

Another help has come from a shift in our focus from supply-side management to POS-managed inventory. To do this, we've brought in POS analysts, whom we have never had before, and demand analysts that are concentrating on this project. We're assigning analysts to each of our key channel partners so we have people who are specialists dedicated to a product in a channel partner. They are not generalists taking a global view of a category, but rather gauging a slim slice of what each channel partner is up to. They are becoming experts in what is happening at the retail end.

You have to have a strong plan to make the forecast good. Any new planning methodology?

We have a sales budget for every one of our channel partners for every week of the year. So we have to be very flexible and agile with our factories in order to change production to be in sync with what's happening on the demand side. In an earlier time, when the focus was all on supply rather than demand, you would try to lock your channel partners into specific quantities. But now you have to be flexible enough to say, “There's risk on both sides; we're both going to take that risk, and, as the market changes, we both have to change as quickly as it's changing.” So it's a very different system than operating with a locked-in production number.

You're doing a lot to ensure that you maintain your lead. What about budgets? Do you have a massive budget for advertising?

We've doubled our advertising budget every year in this three-year stretch so far. It has become an enormous amount of money we're spending for two reasons: to maintain and grow our market share and to enhance our brand image. We believe that, especially with high-priced items, people buy the brand as well as the product features.

Panasonic is noted for its product innovation. But you also hold onto your manufacturing capability. Why is that?

We've always been strong in both product innovation and manufacturing. We outsource very little, because we believe our brand image is only as good as the quality of the product we make. For that reason we make most of our components. Once you start outsourcing the quality of your product, you are risking your brand on someone else's production capabilities.

What excites you most about supply chain management today?

It plays an extraordinarily important role now. It's the key focus of all of our management at Panasonic. Everybody realizes that the only way to take cost out of the system now is on the supply chain side; every other area has been attacked already. In addition to that, supply chain is the key to making sure you have the right product at the right place at the right time: the traditional quandary.

What I think excites everyone here, including me, is not just trying to figure out how to take time out of the production cycle, but also how to rapidly supply our dealers. Instead of making them wait 11–18 days for a delivery, how can we get it to them in 1–3 days? So, we're viewing supply chain management not just from the production and supply side but from the perspective of fully integrating the logistics picture. As a result, we're now repositioning our warehouse facilities as close to our channel partners as possible. If you think about it, the more inventory you have with them, the less flexible they are. And it's difficult for a large channel partner to transfer merchandise back and forth. But it's easy for a supplier to nimbly move that merchandise to where it's needed as rapidly as possible. By offering rapid replenishment to retailers, we can help them keep their inventory at a low level and increase their cash flow rapidly. We'll all profit from that.

See Mike Aguilar at i2 Planet in Las Vegas May 10–12.