CASE STUDY

Syncing supply and demand for an electronics giant
How a control tower delivers the right inventory at the right time

WHO WE WORKED WITH
Panasonic Corporation, a Japanese multinational electronics corporation and one of the largest electronic products manufacturers in the world.

WHAT THE COMPANY NEEDED
A supply chain that made sense of all the signals affecting demand.

HOW WE HELPED
We deployed Lean Digital℠ to create a supply chain control tower for an integrated view of data and supply chain operations.

WHAT THE COMPANY GOT
- A 32% improvement in overall forecast accuracy
- A 50% reduction in slow moving stock numbers for some products
- A 25% increase in productivity and a reduction in errors with fewer manual processes and more automation
Beat the competition by finding a nimble way to meet demand quickly with just the right amount of inventory.

Manufacturers of high-tech products today need an agile and efficient supply chain. It’s the only way to compete in a challenging environment where costs rise faster than revenues, stock keeping units (SKU) are proliferating, and customers can quickly switch brands in response to promotions or discounts. It doesn’t help that a global manufacturing base makes it harder to respond to surge demand efficiently. Meanwhile, the growth of online retail and marketplaces adds to demand volatility. With so many outlets, dynamic pricing, multiple fulfillment locations, and real-time discounting create additional complications.

As one of the largest electronic products manufacturers in the world, Panasonic manages over 15,000 products under its brand. With diverse channel partners as well as multiple distribution centers and manufacturing units, the company’s supply chain forecasting and planning approach couldn’t adequately match demand to supply. The company’s fragmented view of sell-through and point of sale (POS) sometimes led to ineffective promotional efforts, missed opportunities to incorporate customer feedback for product improvements, misdirected discounting, and unsuccessful product launches. And distributors, for their part, weren’t taking full advantage of available funds.

Analyzing data from suppliers and customers was particularly challenging. The company operated on legacy processes that demanded a lot of inefficient manual intervention. Sales, operations, and planning (S&OP) had several such touch-points and baseline data was inconsistent.

The analytics teams were function-oriented and didn’t have an end-to-end view of the supply chain. Planning occurred just once a month, instead of on a more responsive cycle, because the company didn’t have enough point-of-sale data to plan more frequently. With production-to-delivery cycles taking as long as three months—and no agile, real-time decision process—there were shortages of some products and too much stock of others.

Our Solution

Bring down silos. Foster new ways of working. Embed insights into everything the company does.

The lack of powerful digital and analytics tools wasn’t the company’s real problem. At the heart of its challenge was its inability to adopt new ways of working that embed insights into operations. Timely transmission of Data-to-Insight-to-Action℠ across the supply chain makes it more intelligent, able to execute faster and more accurately, and adapt over time, but this is often difficult due to lack of alignment between the front (order management, sales, and marketing), middle (supply chain management, planning, and forecasting) and back office (inventory, manufacturing, sourcing, and procurement) with external vendors and suppliers.

Siloed organizations saddled with pre-existing technology need a more actionable approach to digital transformation. Lean Digital℠ is one such approach. It helps companies focus on what matters, simplifies digital interventions, and applies them in an agile way to deliver game-changing results.

Our supply chain and digital experts made a granular analysis of end-to-end sales and operations planning processes and found critical gaps. We looked at key customers. Issues such as a frequent surge in demand and ad hoc forecasts from channel partners added to supply chain complexity. On the supply side, meanwhile, we found defective components and delayed shipments.

Legacy processes and manual intervention resulted in disparate databases and reporting frequencies. So we introduced an integrated supply chain control tower that uses an agile layer of technology to institute a single version of truth that connects all the relevant data from all the right sources. From there, our team of experts analyzed the data to embed insights into forecasting, planning, and operations (figure 1).
Figure 1: Supply chain control tower enables a responsive supply chain

We also helped the company redefine metrics and KPIs to ensure that each group not only aligned with the end-to-end supply chain, but also with the company’s overall goals. Hierarchy and role-driven dashboards, easy data drill-down for review and monitoring, and integrated insights provided each stakeholder with a clear view of all aspects of the supply chain in real time. The customized, user-friendly dashboards and end-user training made it easy for people to adopt the new solution.

A managed services desk for analytics, data management, and infrastructure made rapid scale-up possible because it allows for sophisticated analyses of more current and accurate data. As a result, the newly proactive supply chain can react to market fluctuations faster than ever before. We also revamped the inventory forecasting model to operate on an intelligent planning platform that uses sell-through data—a more accurate measure of end-customer demand than sell-in data. Now, the company can more accurately model demand and improve trade promotions such as discounting and bundling. All this means the firm can update plans eight times faster than it could previously.

The company can respond much faster to their partners’ launches, promotions, or holiday sales because it is attuned to demand deviations. That gives suppliers and plant managers all the time they need to plan in order to make timely deliveries at the best cost structure for the company.

What’s more, new, granular visibility into sell-through performance is bolstering promotion and product launches at the store level. The control tower is also analyzing customer feedback to drive long-term process change, product quality improvements, supplier governance, and targeted resilient operations.

The near future of digital at the company looks even brighter. It is already preparing for the moment when the Internet of Things (IoT) will use GPS to track shipments all the way from the supplier to the customer. Also underway: Customized user interfaces for warehouse and plant locations, analytics detailing the most cost-effective way to ship goods, and supplier/carrier data that integrates with purchase orders. Through these initiatives, the company expects to reduce inventory and cut back on schedule snafus by 15% and 10%, respectively.
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THE IMPACT

The company got a nimble, alert supply chain that works behind the scenes to delight customers

The newly responsive supply chain is making the company more agile and vastly improving the way inventory, production, and logistics align with market demand. Fulfillment time is faster, which means shorter wait times and delighted customers—key advantages in such a competitive environment.

The control tower provides a real-time view of the supply chain, boosting decision-making in sales and operations planning. And together with the intelligent planning platform, it has improved forecasting accuracy by 32%. The firm now has an effective tool to manage demand and supply volatility, as well as a 50% decline in excess inventory and slow-moving stock numbers for some products (figure 2).

Better visibility combined with real-time information to drive decision-making also helped reduce errors and resulted in a 25% increase in productivity. Supply and demand are now working in sync—and that’s just the beginning of the competitive advantages the company expects to reap in the future.

Figure 2: Forecasting accuracy drives reduction in excess inventory

20% increase in forecast accuracy...

...reduces excess inventory by 50%