

Case Study: Developing and Building Home Improvement Programs

Overview

A leading global provider of innovative professional cleaning solutions markets national brand products to Home Depot, Lowe's and other retailers.

They engaged Enhanced Retail Solutions' consulting when the erratic nature of Home Depot's replenishment system (CARS), combined with the very limited view of retail sales made wholesale forecasting very difficult and costly.

Enhanced Retail Solutions (ERS) software quickly parsed and normalized Home Depot's door level EDI 852 documents to create door level weekly sales and inventory reports. Not only was this company able to get a better handle on sales, they also were able to identify store execution issues: A great many stores had not set certain programs; even with CARS there were other stores that experienced stock outs. They were able to learn seasonal velocity trends and get a "second opinion" on forecasting and replenishment. In fact they asked us to add Lowe's to our analysis and with it identified errors in Lowe's reordering on two separate occasions. They brought those opportunities to the buyer's attention who quickly rectified them.

The Enhanced Retail Solutions' Partnership

Using Enhanced Retail Solutions' services, the manufacturer was able to quickly improve inventory productivity at retail, and improve their wholesale inventory position. In this case they did not want to hire and manage an analyst, as the amount of work did not warrant a full time position (ERS also provides software to companies who have planners on staff). As it does with all its clients, Enhanced Retail Solutions performed an active and integral role in the manufacturer's team, providing information and analysis crucial to improving the accuracy of wholesale planning and sell through at store level.

From A to Z

This case study provides an outline of the strategy and tools employed from the beginning of the process - pinpointing stock level aberrations at door level - to monitoring performance and providing the retailer with actionable recommendations to constantly improve the business. For confidentiality reasons we have masked the name of the client and their numbers and altered report formats, concepts while keeping true to end results.





Getting the Retailer Bonded

Not wanting to disrupt an otherwise healthy relationship with the buyer, our client needed to find a way to bring to light the problems that existed in the retailer's inventory planning process. They were able to meet that goal by creating a fact based set of reports, along with a roadmap of how to fix the problems. The first step was to introduce the visually appealing *Weekly Analyst Report* (see page 2) that shows:

- **Detailed sales and inventory statistics** for each item showing velocity, unit and dollar sales and productivity at store level.
- **The number of stores that are sold out and their unit sales.** The goal is to fix the model stock for these stores so they consistently have enough inventory to service the needs of the customer.

- **The number of stores with inventory, but no sales and their on hand.** Most likely these stores have the merchandise in a stock room, and not on the sales floor. These stores bring down the overall sell through and hamper our ability to determine the appropriate inventory level because their sales cannot be predicted.

Weekly Analyst Report

| ABC Supply Co |  |  |  |  | |
|---|---|---|--|---|-------------|
| Vendor Id: | 1234 | 5678 | 91011 | 121314 | |
| Item Description: | Soap Kit | Bulb Changer | Wash Mitts | Super Mop | |
| Unit Cost: | \$3.34 | \$8.99 | \$3.66 | \$5.75 | |
| Unit Retail: | \$5.96 | \$17.96 | \$7.94 | \$10.96 | |
| Initial MU%: | 44.00% | 49.90% | 53.90% | 47.50% | |
| # Weeks of Sales This Year: | 40 | 40 | 40 | 40 | |
| <u>Inventory Statistics</u> | | | | | |
| On Hand: | 16639 | 17940 | 20636 | 4449 | 59664 |
| Weeks of Supply: | 4.43 | 21.5 | 11.28 | 9.91 | 13.90 |
| Weeks of Supply (with Sls): | 4.42 | 21.26 | 11.25 | 9.51 | |
| Est. YTD Shipped: | 166898 | 51312 | 93798 | 22399 | 334407 |
| <u>Sales Statistics</u> | | | | | |
| YTD Sales \$: | \$893,854 | \$599,192 | \$582,812 | \$797,763 | \$2,873,621 |
| YTD Sales: | 150259 | 33372 | 73162 | 61540 | 318333 |
| YTD ST%: | 90.00% | 65.00% | 78.00% | 74.60% | 73.73% |
| YTD AUR: | \$5.95 | \$17.95 | \$7.97 | \$10.96 | \$9.58 |
| YTD GM\$: | \$391,989 | \$299,178 | \$315,039 | \$416,830 | \$1,423,036 |
| YTD GM%: | 43.90% | 49.90% | 54.06% | 47.50% | 51.07% |
| Av. Weekly Sales \$: | \$22,346 | \$14,980 | \$14,570 | \$19,944 | \$71,840 |
| Av. Weekly Sales: | 3756.5 | 834.3 | 1829.1 | 1538.5 | 7958 |
| Av. Sls \$/Store/Wk(All): | \$11.20 | \$7.52 | \$7.30 | \$10.03 | \$36.05 |
| Av. Sls/Store/Wk(All): | 1.88 | 0.42 | 0.92 | 0.77 | 3.99 |
| Av. Sls \$/Store/Wk(with Sls): | \$11.35 | \$7.69 | \$7.41 | \$10.15 | |
| Av. Sls/Store/Wk(with Sls): | 1.91 | 0.43 | 0.93 | 0.78 | |
| <u>Store Execution Statistics</u> | | | | | |
| # Stores: | 1995 | 1992 | 1996 | 1991 | |
| # Stores with No On Hand (YTD Sales): | 45 (3670) | 122(2003) | 10 (410) | 762 (8119) | |
| # Stores with On Hand and No Sales YTD (On Hand): | 5 (19) | 34 (204) | 12 (53) | 32 (180) | |
| # Stores with Sales YTD: | 1969 | 1949 | 1967 | 1942 | |
| # Stores with No Sales YTD: | 5 | 34 | 12 | 32 | |
| # Stores with YTD ST% >=50% | 1953 | 1558 | 1797 | 1737 | |
| # Stores with YTD ST% <=25% | 26 | 127 | 55 | 102 | |

One item in particular has the biggest in-stock problem. The analysis shows that the super mop has 762 stores (38% of the stores) have run completely out of inventory. Fixing that problem will have an immediate effect on productivity, but should also increase sales significantly because demand is currently greater than supply.

These sample reports show the store detail for those stores in the Weekly Analyst Report that are completely sold out, and stores that have inventory and no sales. These reports were provided to the buying team to help them make adjustments in the model stock for each store, and to send a communication to stores to improve their execution. Our client presented the information in a non-threatening way- as a service that the buying team can take advantage of should they chose to. Presenting the information in this manner made the buying team much more engaged and they took action quickly.

Stores with no stock

| Stores with No On Hand | | | | | | |
|------------------------|-----------------|---------|----------|---------|---------|--|
| Store | Location | On Hand | On Order | In Tran | YTD SLS | |
| 280 | NAPLES FL | 0 | 0 | 0 | 41 | |
| 6310 | HOLLYWOOD FL | 0 | 0 | 0 | 33 | |
| 6408 | SAN JUAN PR | 0 | 0 | 0 | 30 | |
| 3306 | LAS VEGAS NV | 0 | 0 | 0 | 29 | |
| 4608 | FALLS CHURCH VA | 0 | 0 | 0 | 29 | |
| 1701 | HONOLULU HI | 0 | 0 | 0 | 28 | |
| 4702 | SEATTLE WA | 0 | 0 | 0 | 27 | |
| 483 | SURPRISE AZ | 0 | 0 | 0 | 26 | |
| 582 | SAN ANTONIO TX | 0 | 0 | 0 | 26 | |
| 620 | HAWTHORNE CA | 0 | 0 | 0 | 26 | |
| 627 | EMERYVILLE CA | 0 | 0 | 0 | 25 | |
| 6348 | NAPLES FL | 0 | 0 | 0 | 25 | |
| 6664 | COSTA MESA CA | 0 | 0 | 0 | 25 | |
| 628 | SAN CARLOS CA | 0 | 0 | 0 | 24 | |
| 922 | TOTOWA NJ | 0 | 0 | 0 | 24 | |
| 6616 | HOLLYWOOD CA | 0 | 0 | 0 | 24 | |
| 6661 | VAN NUYS CA | 0 | 0 | 0 | 24 | |
| 6892 | AUSTIN TX | 0 | 0 | 0 | 23 | |
| 469 | MESA AZ | 0 | 0 | 0 | 22 | |
| 1048 | LOS ANGELES CA | 0 | 0 | 0 | 22 | |
| 4040 | PORTLAND OR | 0 | 0 | 0 | 22 | |
| 551 | PLANO TX | 0 | 0 | 0 | 21 | |
| 606 | SANTA ANA CA | 0 | 0 | 0 | 21 | |
| 674 | SAN DIEGO CA | 0 | 0 | 0 | 21 | |
| 4723 | REDMOND WA | 0 | 0 | 0 | 21 | |
| 6315 | DELRAY BEACH FL | 0 | 0 | 0 | 21 | |
| 6322 | MIAMI FL | 0 | 0 | 0 | 21 | |
| 6630 | LA QUINTA CA | 0 | 0 | 0 | 21 | |
| 6635 | SAN JOSE CA | 0 | 0 | 0 | 21 | |

Stores with stock and no sales

| Stores with On Hand, No Sales YTD | | | | | | |
|-----------------------------------|---------------------|---------|----------|---------|---------|--|
| Store | Location | On Hand | On Order | In Tran | YTD SLS | |
| 1255 | LONG ISLAND CITY NY | 23 | 0 | 0 | 0 | |
| 3651 | GREENSBORO NC | 12 | 0 | 0 | 0 | |
| 6617 | GLENDORA CA | 12 | 0 | 0 | 0 | |
| 140 | VALDOSTA GA | 11 | 0 | 0 | 0 | |
| 163 | WARNER ROBINS GA | 11 | 0 | 0 | 0 | |
| 2564 | HYATTSVILLE MD | 10 | 0 | 0 | 0 | |
| 8527 | THOMASTON GA | 10 | 0 | 0 | 0 | |
| 387 | NEW ORLEANS LA | 8 | 0 | 0 | 0 | |
| 6501 | HOUSTON TX | 8 | 0 | 0 | 0 | |
| 8551 | CHANTILLY VA | 8 | 0 | 0 | 0 | |
| 1087 | MORENO VALLEY CA | 7 | 0 | 0 | 0 | |
| 561 | MIDLAND TX | 6 | 0 | 0 | 0 | |
| 1238 | JAMAICA NY | 6 | 0 | 0 | 0 | |
| 2619 | GREENFIELD MA | 6 | 0 | 0 | 0 | |
| 1773 | CORDELE GA | 5 | 0 | 0 | 0 | |
| 8919 | LITTLE ROCK AR | 5 | 0 | 0 | 0 | |
| 809 | SYLACAUGA AL | 4 | 0 | 0 | 0 | |
| 1909 | CALUMET CITY IL | 4 | 0 | 0 | 0 | |
| 616 | MORENO VALLEY CA | 3 | 0 | 0 | 0 | |
| 965 | MONTVILLE NJ | 3 | 0 | 0 | 0 | |
| 1282 | SHIRLEY NY | 3 | 0 | 0 | 0 | |
| 2502 | BALTIMORE MD | 3 | 0 | 0 | 0 | |
| 2819 | COTTAGE GROVE MN | 3 | 0 | 0 | 0 | |
| 6904 | SADDLE BROOK NJ | 3 | 0 | 0 | 0 | |
| 112 | Austell GA | 3 | 0 | 0 | 0 | |
| 2032 | MARION IN | 3 | 0 | 0 | 0 | |
| 3702 | BISMARCK ND | 3 | 0 | 0 | 0 | |
| 4552 | BRATTLEBORO VT | 3 | 0 | 0 | 0 | |
| 4913 | MILWAUKEE WI | 3 | 0 | 0 | 0 | |

Understanding Where Items Sell

Once model stocks and inventory levels for each item were adjusted we studied the geographic and demographic makeup of the top and bottom performing stores. If we know that particular region sells a particular item better than another our client can make better recommendations to the buyer on how to allocate new items and continually fine tune the store distribution on existing items in the line.

While this exercise is the buyer's job, they simply don't have the time and resources to do this for every single SKU in the thousands of stores that they manage. A vendor who can provide fact-based, actionable information to help the buyer make decisions becomes a very valuable resource – creating a competitive advantage.

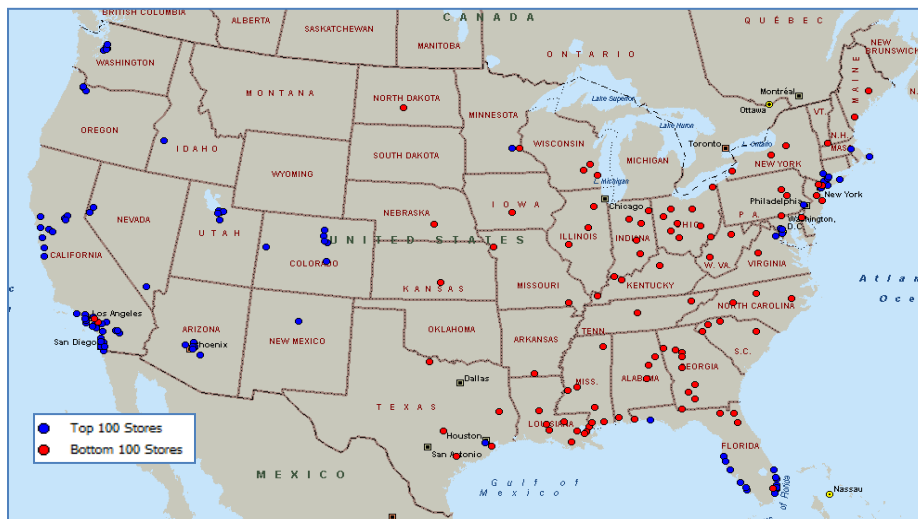
The Store Ranking and Performance report sorts stores based on total units sold and sell through for a given time period. It then provides a composite ranking which is simply the average of the sales and sell through rankings. For example: if a store is ranked number 1 in sales and number 3 in sell through, their average ranking is 2 ($2 = (1 + 3) / 2$). Finally stores are sorted by average ranking and the final composite ranking is derived. This allows a store that may not have received a lot of inventory to move up on the ranking if they sold through quicker than others. Doing this highlights potential sales opportunities and inventory problems.

Store Ranking and Performance Report with composite rankings

| STORE | LOCATION | ON HAND | YTD SLS | YTD ST% | AV WK SLS | WEEKS OH | SLS RK | ST RK | AV RK |
|-------|----------------------|---------|---------|---------|-----------|----------|--------|-------|-------|
| 6175 | NEW YORK NY | 80 | 1346 | 94.40% | 33.7 | 2.4 | 1 | 3 | 1 |
| 4415 | PARK CITY UT | 73 | 815 | 91.80% | 20.4 | 3.6 | 5 | 5 | 2 |
| 674 | SAN DIEGO CA | 88 | 856 | 90.70% | 21.4 | 4.1 | 4 | 8 | 3 |
| 280 | NAPLES FL | 71 | 792 | 91.80% | 19.8 | 3.6 | 8 | 6 | 4 |
| 657 | SAN RAFAEL CA | 74 | 666 | 90.00% | 16.7 | 4.4 | 13 | 13 | 5 |
| 6204 | NORWALK CT | 93 | 740 | 88.80% | 18.5 | 5. | 9 | 17 | 6 |
| 472 | SCOTTSDALE AZ | 62 | 606 | 90.70% | 15.2 | 4.1 | 18 | 9 | 7 |
| 6630 | LA QUINTA CA | 124 | 883 | 87.70% | 22.1 | 5.6 | 3 | 30 | 8 |
| 660 | ENCINITAS CA | 112 | 811 | 87.90% | 20.3 | 5.5 | 6 | 29 | 9 |
| 6310 | HOLLYWOOD FL | 53 | 536 | 91.00% | 13.4 | 4. | 31 | 7 | 10 |
| 618 | TORRANCE CA | 77 | 593 | 88.50% | 14.8 | 5.2 | 20 | 21 | 11 |
| 4413 | SALT LAKE CITY UT | 74 | 573 | 88.60% | 14.3 | 5.2 | 23 | 19 | 12 |
| 667 | RANCHO MIRAGE CA | 53 | 511 | 90.60% | 12.8 | 4.1 | 37 | 10 | 13 |
| 6664 | COSTA MESA CA | 93 | 649 | 87.50% | 16.2 | 5.7 | 14 | 34 | 14 |
| 680 | SAN DIEGO CA | 73 | 557 | 88.40% | 13.9 | 5.2 | 28 | 24 | 15 |
| 6611 | LOS ANGELES CA | 115 | 732 | 86.40% | 18.3 | 6.3 | 10 | 55 | 16 |
| 6177 | NEW YORK NY | 165 | 1024 | 86.10% | 25.6 | 6.4 | 2 | 67 | 17 |
| 1526 | GLENDALE CO | 74 | 508 | 87.30% | 12.7 | 5.8 | 39 | 35 | 18 |
| 251 | NORTH MIAMI BEACH FL | 70 | 493 | 87.60% | 12.3 | 5.7 | 44 | 32 | 19 |
| 6967 | SEASIDE CA | 73 | 503 | 87.30% | 12.6 | 5.8 | 41 | 36 | 20 |

For store chains with thousands of stores it can be difficult to glean regional performance levels by just looking at the report. As a final step, we map the top 100 and bottom 100 stores and highlight them with different colors. In this example you can clearly see that the top performing stores in blue are located primarily in coastal areas, and poor performing stores in red are in the Mid West and South.

Mapping top and bottom stores



While the map shows performance based on geography, the Demographic Summary shows the demographic profile of the top and bottom stores. Understanding who lives in the communities of the best stores (their age, ethnicity, income, education, etc.) will enable us to match products to the targeted consumer. This a much more accurate way to allocate products than simply assigning each store a sales volume level based on total population. Just because there are a lot of people living in a particular region does not mean they are the intended consumer for that product. For example, placing a luxury item in a store that has a large low income population would be disastrous.

Super Mop demographic makeup chart

| | MEDIAN AGE | % WHITE | % AFAM | % ASIAN | % HISP | % MARRIED | % KIDS <18 | OWN HOME | RENT HOME | AV HH SIZE | % BACH DEGREE | HHOLD INCOME | # ROOMS |
|---------------|------------|---------|--------|---------|--------|-----------|------------|----------|-----------|------------|---------------|--------------|---------|
| Top 25% | 35.3 | 76.4% | 5.3% | 5.4% | 13.8% | 44.3% | 32.6% | 64.3% | 32.6% | 2.63 | 30.2% | \$51,601 | 5.3 |
| Bottom 10% | 34.1 | 70.8% | 13.1% | 3.0% | 15.5% | 41.9% | 33.6% | 59.8% | 36.9% | 2.67 | 19.4% | \$40,539 | 5.1 |
| AV. of All : | 35.0 | 76.3% | 9.9% | 3.8% | 12.2% | 44.5% | 34.3% | 66.4% | 32.2% | 2.68 | 26.1% | \$47,642 | 5.4 |
| US Average | 35.3 | 75.1% | 12.3% | 3.6% | 12.5% | 51.7% | 36.0% | 66.2% | 33.8% | 2.69 | 24.4% | \$41,994 | 5.3 |
| Home Depot Av | 34.9 | 74.9% | 10.7% | 4.5% | 15.4% | 44.6% | 36.0% | 65.9% | 34.8% | 2.78 | 26.2% | \$48,130 | 5.4 |

The demographic profile compares various characteristics for the top and bottom stores against the U.S. average, the average of all stores in the distribution for the item and the retailer’s profile for all their stores in the chain. A number in green represents a characteristic 5% or more above the U.S. average; a number in red represents a characteristic 5% or more below the U.S. average. The profile shows that the top selling stores are located in communities where the average age is 35.3, primarily White Asian or Hispanic, single with less kids and higher education and income levels as compared to the U.S. average. Behind the summary lies a list of each store and their respective demographics. This allows us to find other stores in the chain that currently don’t have distribution on this item to suggest adding them to the distribution. This profile can also be used to allocate new items that are similar in character to this item or use this information to allocate the same or a new item to a competing retailer- minimizing the risk of initial allocation to those stores that we know have the best chance of selling it. It also works in reverse – Our client can suggest not shipping merchandise to stores in markets we know don’t have the targeted consumer.

These initial analyses allowed us to fix the model stock problems at store level, improve store execution and develop an understanding of where and why products are selling. The next phase is to develop an internal model to plan and manage wholesale inventory.

Developing an Appropriate Model for Planning Wholesale Inventory

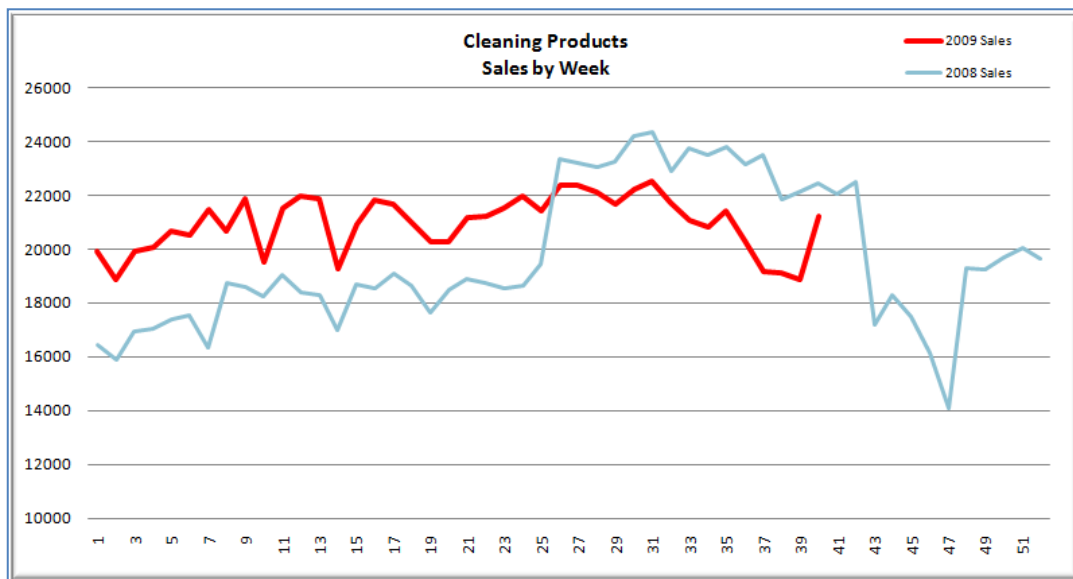
By adjusting the model stock for each item in each store, sales and inventory levels will become more predictable enabling production planning to become more accurate. Sales stabilized and we were able to start seeing trends. With 6 months of history, and overall category sales which the buyer provided, we were able to construct “sales curves” that shows the expected peaks and lulls (seasonality) in business for each week. With a curve you can estimate future sales (and calculate a desired level of inventory) by dividing any known sales for a given time period by the sum of curve percentages for that same period of time. The curves enable us to improve the receipt flow both on a wholesale level and retail level. There can be different curves for different items as seasonality may be different based on the nature of an item. For instance, we all know snow shovels sell more in the winter months, rakes more in spring and fall. The more sales history you have, the more accurate a curve can be.

The Sales by Week Report simply shows the history by week for any given period of time for both unit and dollar sales. It is a good idea to track sales against the plan (curve %) to see if any unexpected trends have occurred.

Sales by week report

| Last 8 Weeks Selling Report | | | Unit Sales | | | | | | | | | | |
|-----------------------------|--------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|--------------------|--|
| Item | Description | Cost | 3309 | 3409 | 3509 | 3609 | 3709 | 3809 | 3909 | 4009 | Last 8 | YTD | |
| 1234 | Soap Kit | \$8.99 | 996 | 1093 | 804 | 826 | 978 | 849 | 840 | 811 | 7197 | 33372 | |
| 5678 | Bulb Changer | \$2.59 | 825 | 788 | 820 | 798 | 707 | 790 | 737 | 825 | 6290 | 32467 | |
| 91011 | Wash Mitts | \$2.96 | 1185 | 1258 | 1281 | 1244 | 1071 | 1170 | 1098 | 1349 | 9656 | 53188 | |
| 121314 | Super Mop | \$3.66 | 1749 | 1889 | 1810 | 1853 | 1524 | 1700 | 1520 | 2077 | 14122 | 73162 | |
| Totals | | | 4755 | 5028 | 4715 | 4721 | 4280 | 4509 | 4195 | 5062 | 37265 | 192189 | |
| | | | Dollar Sales | | | | | | | | | | |
| | | | \$17,868 | \$19,607 | \$14,480 | \$14,861 | \$17,585 | \$15,258 | \$15,068 | \$14,593 | \$129,320 | \$599,192 | |
| | | | \$4,967 | \$4,749 | \$4,935 | \$4,796 | \$4,260 | \$4,752 | \$4,434 | \$4,966 | \$37,859 | \$195,132 | |
| | | | \$8,289 | \$8,795 | \$8,961 | \$8,699 | \$7,497 | \$8,190 | \$7,686 | \$9,434 | \$67,551 | \$370,837 | |
| | | | \$13,992 | \$15,092 | \$14,464 | \$14,718 | \$12,166 | \$13,589 | \$12,108 | \$16,603 | \$112,732 | \$582,812 | |
| | | | \$45,116 | \$48,243 | \$42,840 | \$43,074 | \$41,508 | \$41,789 | \$39,296 | \$45,596 | \$347,462 | \$1,747,973 | |

This graph is a visual representation of the sales by week report. Each week's sales is divided by the total annual sales to come up with each week's curve %. In this case we have 2 years of history and you can see that for the most part even though the level of sales is different; the 2 lines follow a similar path.



Now that we have established a sales curve, together with a weeks of supply model we can estimate future sales and an appropriate starting inventory level for each period. The goal is to blend the retail sales forecast with the wholesale inventory (available to ship and future production on order) and build a schedule for future wholesale buys. This is particularly important with auto-replenishment programs such as CARS which are reactive (the reorder quantity matches the sale quantity on a one-to-one basis).

Step 1 takes year to date sales and divides it by the sum of curve percentages for all those weeks. In this example, we sold 61,754 units over the last 49 weeks, and those 49 weeks were worth 96.5% of the total year (curve %). We now divide the sales units by the curve % to come up with the total potential across the curve- 63,994 units (61,754/.965).

Store sales and inventory statistics for the item with wholesale inventory

| UPC | DESCRIPTION | # WEEKS SALES | STORE ON HAND | STORE ON ORDER | YTD SALES | AV WK SLS | STORE WEEKS OH | % COMPLETE | % FWD COVERAGE |
|-----------------|--------------|---------------|---------------|----------------|-----------|-----------|----------------|------------|----------------|
| XXXX | Bulb Changer | 49 | 21198 | 0 | 61754 | 1260 | 16.82 | 96.5% | 24.8% |
| Curve: | 23 | | ATS | FUTURES | | | TOT WKS OH | | |
| Potential: | 63994 | | 1000 | 800 | | | 17.61 | | |
| WOS Model: | 14 | | | | | | | | |
| Adjustment: | 1 | | | | | | | | |
| Wholesale Cost: | \$1.49 | | | | | | | | |

The next step involves running a simple open to buy schedule for each week (or month). The calculated beginning on hand (Calc BOH) adds the estimated sales for each week for the number of weeks of supply. In this case, the weeks of supply model is 14 weeks and the next 14 weeks of estimated sales adds up to 14,847. We start the period with the quantity (unless the actual on hand is higher, in this case it is), subtract sales and add and orders expected to come in during the period. The result is the ending on hand (EOH). We can now compare the ending on hand for the current period to the calculated beginning on hand for the next period. If the ending on hand is higher, we don't need to buy anything for this period, and the actual beginning on hand for the next period is the ending on hand for the previous period. If the ending on hand for the current period is lower than the calculated beginning on hand for the next period, the difference is the buy that needs to be placed to ensure we can get to the expected inventory level. This doesn't happen in this example until the week ending February 20th, where 796 units are required to meet the inventory needs.

| Week End: | Jan-09-08 | Jan-16-08 | Jan-23-08 | Jan-30-08 | Feb-06-08 | Feb-13-08 | Feb-20-08 | Feb-27-08 | Mar-05-08 | Mar-12-08 | Mar-19-08 | Mar-26-08 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CALC BOH | 14847 | 15870 | 16510 | 17022 | 16894 | 17214 | 17342 | 17534 | 17726 | 18302 | 18174 | 17790 |
| ACT BOH | 22198 | 21622 | 21110 | 20534 | 19382 | 18722 | 17698 | 17534 | 17726 | 18302 | 18174 | 17790 |
| - Estimated Sales | 576 | 512 | 576 | 1152 | 960 | 1024 | 960 | 896 | 960 | 1408 | 1472 | 1152 |
| + On Order | 0 | | | | 300 | | | | 500 | | | |
| EOH | 21622 | 21110 | 20534 | 19382 | 18722 | 17698 | 16739 | 16638 | 17266 | 16894 | 16702 | 16638 |
| Calculated BOH Next Week | 15870 | 16510 | 17022 | 16894 | 17214 | 17342 | 17534 | 17726 | 18302 | 18174 | 17790 | 17534 |
| Buy | 0 | 0 | 0 | 0 | 0 | 0 | 796 | 1088 | 1036 | 1280 | 1088 | 896 |
| Wholesale Buy Cost: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,186 | \$1,621 | \$1,543 | \$1,907 | \$1,621 | \$1,335 |
| Avail Prod (Y/N) | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |

We include a production availability "flag" that tells the forecasting system whether or not an order can be placed. For example if an item is imported and has a long lead time, perhaps the 796 units will not be available. In that case the flag is changed from "Y" to "N" and the forecasts assumes the buy will not be made and adjusts the future buys and inventory levels accordingly.

The forecast schedule proved to be great for the wholesale planning team as well as the inventory planner at the retailer. However higher management levels wanted to see recaps of the buys and the exceptions (items where immediate action is required). Whether an immediate buy was required or an overstock existed, this forecast exception report covered their needs:

| Forecast Exception Report | | | | | | | | | | | | |
|---------------------------|--------------|---------------------|---------------|---------------------------|------------------------|---------|---------|---------------------|---------------------|-------------------|----------|--------|
| | | Count of Items | % of Total | | | | | | | | | |
| Items With A/O Needs | | 1 | 25.00% | | | | | | | | | |
| > 10% Short of Model | | 1 | 25.00% | | | | | | | | | |
| > 10% Above Model | | 3 | 75.00% | | | | | | | | | |
| Total Items With Sales | | 4 | | | | | | | | | | |
| | | | | | | | | | | Sales Projections | | |
| SKU # | Description | # of Weeks of Sales | EOH This Week | Calc BOH Needs Next Month | % Over/Short Model BOH | A/O BUY | Overage | Store Weeks On Hand | Total Weeks On Hand | 13 Weeks | 26 Weeks | Life |
| 1234 | Soap Kit | 49 | 20719 | 66117 | -68.66% | 45399 | | 6.60 | 6.60 | 61852 | 121571 | 266602 |
| 5678 | Wash Mitts | 49 | 17706 | 10723 | 65.12% | 0 | 6983 | 20.23 | 21.25 | 10031 | 19717 | 43238 |
| 91011 | Super Mop | 49 | 22196 | 14683 | 51.17% | 0 | 7514 | 27.31 | 29.24 | 13735 | 26997 | 59204 |
| 121314 | Bulb Changer | 49 | 21622 | 15870 | 36.24% | 0 | 5752 | 16.82 | 17.61 | 14847 | 29181 | 63994 |

Providing Visibility to the Business on a Weekly Level

Together with our client, we developed a discipline for studying the business in detail. On a weekly basis this involved generating a variety of sales and inventory reports at various levels (SKU, category, brand, retailer, etc). Because we offer customized reporting we were able to quickly access their needs and develop exactly what they wanted. It is also very amenable to change, and has changed several times throughout our 3+ years engagement. The Weekly Analyst report (see page 2) is the benchmark for each week. In addition we review the most recent 3 weeks and show sales units, dollars, on hand inventory and sell through for each item, category and retailer in total.

Weekly Summary by Item and Category:

| | | | | | | | | | | | | | | UNITS | | | | |
|---------------------------------------|------------|----------|---------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|-------------|-------------|--------------|-------|--|--|--|--|
| DESCRIPTION | Brand | Category | # WEEKS | WK 38 | WK 39 | WK 40 | LY LW | YTD | LW | LY LW | LW | LY LW | YTD | | | | | |
| | | | | 10/24/2008 | 10/31/2008 | 11/7/2008 | TOTAL | STORE OH | STORE OH | ST% | ST% | ST% | | | | | | |
| "9"" FLOW-THRU SOFT BRUSH" | ACME | Brush | 40 | 1650 | 1499 | 1836 | 1454 | 80472 | 20164 | 18871 | 8.3% | 7.2% | 80.0% | | | | | |
| TILE AND GROUT SWIVEL BRUSH | ACME | Brush | 40 | 778 | 738 | 752 | 837 | 39709 | 20312 | 18096 | 3.6% | 4.4% | 66.2% | | | | | |
| TILE AND GROUT CORNER BRUSH | ACME | Brush | 40 | 737 | 747 | 771 | 796 | 34421 | 19681 | 18200 | 3.8% | 4.2% | 63.6% | | | | | |
| PRO Waterflow Deck Scrub Brush | ACME | Brush | 34 | 789 | 703 | 799 | 0 | 34995 | 18973 | 0 | 4.0% | #DIV/O! | 64.8% | | | | | |
| TOTAL REACH DRYER VENT BRUSH | SUPER ACME | Brush | 40 | 1691 | 1621 | 1783 | 1861 | 75804 | 21349 | 19729 | 7.7% | 8.6% | 78.0% | | | | | |
| Total Brushes | | | | 5645 | 5308 | 5941 | 4948 | 265401 | 100479 | 74896 | 5.6% | 6.2% | 72.5% | | | | | |
| OSTRICH FEATHER DUSTER | ACME | Dusting | 40 | 786 | 774 | 857 | 814 | 30794 | 16081 | 14042 | 5.1% | 5.5% | 65.7% | | | | | |
| WOOL DUSTER | ACME | Dusting | 40 | 859 | 896 | 1025 | 1025 | 36259 | 15316 | 13702 | 6.3% | 7.0% | 70.3% | | | | | |
| MICROFIBER MITT | ACME | Dusting | 40 | 1232 | 1302 | 1449 | 1510 | 63176 | 20090 | 17598 | 6.7% | 7.9% | 75.9% | | | | | |
| Microfiber Ceiling Fan Duster | ACME | Dusting | 16 | 1061 | 999 | 1115 | 0 | 14979 | 13713 | 0 | 7.5% | | 52.2% | | | | | |
| Microfiber Quick & Clean Cloths | ACME | Dusting | 15 | 179 | 180 | 221 | 0 | 3142 | 4254 | 0 | 4.9% | | 42.5% | | | | | |
| Microfiber Quick & Clean Cloths | ACME | Dusting | 15 | 112 | 113 | 141 | 0 | 1803 | 4186 | 0 | 3.3% | | 30.1% | | | | | |
| COB WEB DUSTER | SUPER ACME | Dusting | 40 | 3490 | 3391 | 3849 | 3276 | 132245 | 19496 | 19190 | 16.5% | 14.6% | 87.2% | | | | | |
| TOTAL REACH CEILING FAN DUSTER | SUPER ACME | Dusting | 40 | 344 | 313 | 292 | 1356 | 36523 | 5284 | 14661 | 5.2% | 8.5% | 87.4% | | | | | |
| 6PACK MICROFIBER CLOTH-CUTCASE | SUPER ACME | Dusting | 40 | 2216 | 2347 | 2478 | 3596 | 122666 | 23317 | 24765 | 9.6% | 12.7% | 84.0% | | | | | |
| Multi-Project MF Cloths - 4 Pack | SUPER ACME | Dusting | 40 | 1252 | 1213 | 1395 | 1833 | 61361 | 25514 | 19745 | 5.2% | 8.5% | 70.6% | | | | | |
| Dust + Polish MF Cloths - 3 Pack | SUPER ACME | Dusting | 40 | 1022 | 1012 | 1145 | 1350 | 47899 | 21834 | 19047 | 5.0% | 6.6% | 68.7% | | | | | |
| Stainless / Metals MF Cloths - 3 Pack | SUPER ACME | Dusting | 40 | 761 | 756 | 741 | 955 | 34609 | 23088 | 19431 | 3.1% | 4.7% | 60.0% | | | | | |
| Mirror & Glass MF Cloths - 3 Pack | SUPER ACME | Dusting | 40 | 1523 | 1396 | 1791 | 1773 | 68700 | 21799 | 20129 | 7.6% | 8.1% | 75.9% | | | | | |
| Total Dusting | | | | 19099 | 18846 | 21221 | 22448 | 838331 | 284960 | 260576 | 6.9% | 7.9% | 74.6% | | | | | |

Because most of the items we track are on-going and basic in nature we can provide a variety of comparisons between this year and last year. This helps us ensure the curve for forecasting is constantly updated and points out aberrations in business we were not expecting. *This Year Vs. Last Year Report:*

| This Year vs. Last Year | | | | | | | | | | | | | | | | | |
|-------------------------|--------------|-------------|-------------|----------------|--------------|--------------|---------------|--------|--------|-----------------|-----------------|---------------|----------------|----------------|--|------|--|
| | | 4908 | | | 4909 | | | 4908 | | | 4909 | | | 4908 | | 4909 | |
| Item | Description | LY Units | TY Units | % Change | LY On Hand | TY On Hand | % Change | LY ST% | TY ST% | LY Sales \$ | TY Sales \$ | % Change | LY Store Count | TY Store Count | | | |
| 1234 | Soap Kit | 2297 | 2529 | 10.10% | 19000 | 23118 | 21.67% | 10.79% | 7.57% | \$13,671 | \$1,521 | -88.87% | 1990 | 1995 | | | |
| 5678 | Bulb Changer | 1004 | 1171 | 16.63% | 14089 | 17227 | 22.27% | 6.65% | 6.36% | \$18,004 | \$21,075 | 17.06% | 1986 | 1993 | | | |
| 91011 | Wash Mitts | 650 | 569 | -12.46% | 18879 | 21229 | 12.45% | 3.33% | 2.61% | \$3,902 | \$3,431 | -12.07% | 1990 | 1996 | | | |
| 121314 | Super Mop | 1151 | 1201 | 4.34% | 19813 | 21198 | 6.99% | 5.49% | 3.96% | \$8,034 | \$8,134 | 1.24% | 1991 | 1997 | | | |
| Totals | | 5102 | 5470 | -11.64% | 71781 | 82772 | 15.31% | | | \$43,611 | \$34,161 | -3.99% | | | | | |

We look at the ratio between shipped and sold for each SKU to ensure the inventory remains balanced.

Selling Ratios Report:

| Description | Color | On Hand | % to Total | Shipped | % Shipped | Wk Sales | % to Total | WK ST% | YTD Sales | % to Total | YTD ST% |
|--------------------------------|-------|----------------|------------|----------------|-----------|--------------|------------|--------------|----------------|------------|---------------|
| 1 QUART LIQUID SOAP | ACME | 16639 | 1.47% | 166898 | 3.86% | 4084 | 5.16% | 19.71% | 150259 | 4.71% | 90.03% |
| "24"" STRAIGHT FLOOR SQUEEGEE" | ACME | 17940 | 1.58% | 51312 | 1.19% | 811 | 1.03% | 4.33% | 33372 | 1.05% | 65.04% |
| "8"" STEEL SQUEEGEE" | ACME | 20635 | 1.82% | 53102 | 1.23% | 825 | 1.04% | 3.84% | 32467 | 1.02% | 61.14% |
| "12"" STEEL SQUEEGEE" | ACME | 20076 | 1.77% | 73264 | 1.69% | 1349 | 1.71% | 6.30% | 53188 | 1.67% | 72.60% |
| "16"" STEEL SQUEEGEE" | ACME | 20636 | 1.82% | 93798 | 2.17% | 2077 | 2.63% | 9.14% | 73162 | 2.30% | 78.00% |
| "18"" BRASS SQUEEGEE" | ACME | 4449 | 0.39% | 22399 | 0.52% | 174 | 0.22% | 3.76% | 17950 | 0.56% | 80.14% |
| "10"" COMBI" | ACME | 20937 | 1.84% | 82477 | 1.91% | 1521 | 1.92% | 6.77% | 61540 | 1.93% | 74.61% |
| "14"" SCRUBBER" | ACME | 20377 | 1.79% | 62844 | 1.45% | 1146 | 1.45% | 5.32% | 42467 | 1.33% | 67.58% |
| PRO SCRUBBER | ACME | 20844 | 1.84% | 58093 | 1.34% | 938 | 1.19% | 4.31% | 37249 | 1.17% | 64.12% |
| "36"" NIFTY NABBER DISPLAY" | ACME | 38047 | 3.35% | 185678 | 4.30% | 2765 | 3.50% | 6.77% | 147631 | 4.63% | 79.51% |
| "18"" FLOOR SQUEEGEE" | ACME | 36543 | 3.22% | 205105 | 4.74% | 3898 | 4.93% | 9.64% | 168562 | 5.29% | 82.18% |
| HOME DEPOT TOTALS | | 1135651 | | 4322954 | | 79079 | | 6.51% | 3187303 | | 73.73% |

From time to time we may also provide more detailed reporting at store level. The following chart shows how each item performed in a given store. This report can be sorted to show groups of stores that do better with one type of item or another. *Related Performance Report:*

| STORE | LOCATION | SALES | | | OH | | | % to TOT | | | SALES | | | OH | | | % to TOT | |
|-------|--------------------|----------|----------|----------|--------------|--------------|--------------|------------|------------|------------|-----------|-----------|-----------|---------|----------|--|----------|--|
| | | Soap Kit | Soap Kit | Soap Kit | Bulb Changer | Bulb Changer | Bulb Changer | Wash Mitts | Wash Mitts | Wash Mitts | Super Mop | Super Mop | Super Mop | TOT SLS | % to TOT | | | |
| 6175 | NEW YORK NY | 359 | 19 | 41.10% | | | 0.00% | 214 | 28 | 24.50% | 301 | 31 | 34.40% | 874 | 0.30% | | | |
| 674 | SAN DIEGO CA | 446 | 14 | 55.90% | 66 | 1 | 8.30% | 112 | 7 | 14.00% | 174 | 17 | 21.80% | 798 | 0.30% | | | |
| 6630 | LA QUINTA CA | 572 | 38 | 72.20% | 27 | 11 | 3.40% | 50 | 16 | 6.30% | 143 | 15 | 18.10% | 792 | 0.30% | | | |
| 660 | ENCINITAS CA | 437 | 12 | 58.80% | 20 | 8 | 2.70% | 105 | 13 | 14.10% | 181 | 12 | 24.40% | 743 | 0.20% | | | |
| 280 | NAPLES FL | 418 | 61 | 59.00% | 50 | 4 | 7.10% | 105 | 29 | 14.80% | 136 | 29 | 19.20% | 709 | 0.20% | | | |
| 4415 | PARK CITY UT | 471 | 34 | 67.00% | 33 | 6 | 4.70% | 72 | 7 | 10.20% | 127 | 9 | 18.10% | 703 | 0.20% | | | |
| 6616 | HOLLYWOOD CA | 294 | 15 | 42.90% | 38 | 10 | 5.50% | 124 | 29 | 18.10% | 229 | 38 | 33.40% | 685 | 0.20% | | | |
| 6204 | NORWALK CT | 374 | 18 | 55.00% | 21 | 15 | 3.10% | 151 | 13 | 22.20% | 134 | 14 | 19.70% | 680 | 0.20% | | | |
| 6177 | NEW YORK NY | 125 | 13 | 18.90% | | | 0.00% | 194 | 40 | 29.30% | 344 | 51 | 51.90% | 663 | 0.20% | | | |
| 1701 | HONOLULU HI | 307 | 19 | 47.70% | 114 | 11 | 17.70% | 77 | 18 | 12.00% | 146 | 11 | 22.70% | 644 | 0.20% | | | |
| 220 | LAKE PARK FL | 465 | 134 | 74.60% | 14 | 15 | 2.20% | 28 | 17 | 4.50% | 116 | 25 | 18.60% | 623 | 0.20% | | | |
| 6611 | LOS ANGELES CA | 417 | 25 | 67.10% | 15 | 8 | 2.40% | 111 | 21 | 17.90% | 78 | 28 | 12.60% | 621 | 0.20% | | | |
| 6664 | COSTA MESA CA | 303 | 3 | 51.20% | 57 | 8 | 9.60% | 88 | 17 | 14.90% | 144 | 24 | 24.30% | 592 | 0.20% | | | |
| 6348 | NAPLES FL | 363 | 45 | 62.90% | 52 | 10 | 9.00% | 54 | 14 | 9.40% | 108 | 29 | 18.70% | 577 | 0.20% | | | |
| 472 | SCOTTSDALE AZ | 394 | 21 | 68.50% | 32 | 13 | 5.60% | 43 | 10 | 7.50% | 106 | 13 | 18.40% | 575 | 0.20% | | | |
| 657 | SAN RAFAEL CA | 353 | 25 | 63.10% | 21 | 7 | 3.80% | 66 | 8 | 11.80% | 119 | 14 | 21.30% | 559 | 0.20% | | | |
| 618 | TORRANCE CA | 327 | 16 | 60.90% | 36 | 7 | 6.70% | 68 | 8 | 12.70% | 106 | 16 | 19.70% | 537 | 0.20% | | | |
| 6372 | FORT LAUDERDALE FL | 354 | 54 | 65.90% | 57 | 8 | 10.60% | 43 | 11 | 8.00% | 83 | 16 | 15.50% | 537 | 0.20% | | | |
| 4711 | BELLEVUE WA | 347 | 25 | 65.70% | 35 | 5 | 6.60% | 49 | 18 | 9.30% | 97 | 8 | 18.40% | 528 | 0.20% | | | |
| 620 | HAWTHORNE CA | 279 | 19 | 53.20% | 25 | 13 | 4.80% | 82 | 8 | 15.60% | 138 | 16 | 26.30% | 524 | 0.20% | | | |
| 6310 | HOLLYWOOD FL | 263 | 43 | 50.20% | 74 | 10 | 14.10% | 49 | 15 | 9.40% | 138 | 30 | 26.30% | 524 | 0.20% | | | |
| 255 | SARASOTA FL | 288 | 42 | 55.10% | 34 | 1 | 6.50% | 80 | 12 | 15.30% | 121 | 15 | 23.10% | 523 | 0.20% | | | |
| 6322 | MIAMI FL | 385 | 61 | 74.20% | 31 | 7 | 6.00% | 31 | 11 | 6.00% | 72 | 8 | 13.90% | 519 | 0.20% | | | |
| 483 | SURPRISE AZ | 330 | 37 | 63.70% | 25 | 10 | 4.80% | 39 | 14 | 7.50% | 124 | 23 | 23.90% | 518 | 0.20% | | | |
| 4706 | SEATTLE WA | 317 | 11 | 62.20% | 28 | 7 | 5.50% | 66 | 17 | 12.90% | 99 | 10 | 19.40% | 510 | 0.20% | | | |
| 1912 | CHICAGO IL | 281 | 18 | 56.90% | 39 | 7 | 7.90% | 50 | 14 | 10.10% | 124 | 15 | 25.10% | 494 | 0.20% | | | |
| 680 | SAN DIEGO CA | 267 | 23 | 54.50% | 47 | 3 | 9.60% | 56 | 16 | 11.40% | 120 | 16 | 24.50% | 490 | 0.20% | | | |
| 1848 | EL CAJON CA | 230 | 18 | 47.20% | 55 | 18 | 11.30% | 53 | 10 | 10.90% | 149 | 14 | 30.60% | 487 | 0.20% | | | |
| 4413 | SALT LAKE CITY UT | 290 | 5 | 60.00% | 32 | 6 | 6.60% | 49 | 18 | 10.10% | 112 | 15 | 23.20% | 483 | 0.20% | | | |
| 274 | JUPITER FL | 278 | 48 | 58.60% | 43 | 18 | 9.10% | 65 | 12 | 13.70% | 88 | 18 | 18.60% | 474 | 0.20% | | | |
| 667 | RANCHO MIRAGE CA | 309 | 31 | 65.90% | 24 | 8 | 5.10% | 36 | 11 | 7.70% | 100 | 13 | 21.30% | 469 | 0.10% | | | |
| 4002 | TIGARD OR | 314 | 15 | 67.40% | 26 | 7 | 5.60% | 43 | 17 | 9.20% | 83 | 23 | 17.80% | 466 | 0.10% | | | |
| 1703 | KAHULUI HI | 258 | 30 | 55.50% | 44 | 16 | 9.50% | 51 | 8 | 11.00% | 112 | 40 | 24.10% | 465 | 0.10% | | | |

Conclusion

What started off as an engagement to fix a major inventory control problem at one retailer has turned into a major competitive advantage for our client at multiple retail chains. For instance, ERS reporting helped this client grow its sales at one National Home Center from 100 stores to 400 stores in one year. The weekly reports helped our client show the buying team the sales potential by store, and also helped to analyze their inventory needs, which they love!

The wide scope of information presented in visually appealing reports provides their buyers with decision making tools other vendors are cannot. Essentially, our client has become an enormous resource and trusted advisor, not just for product, but for ensuring the business is performing to expectations. They pinpoint store execution opportunities, ensure stores are properly inventoried, help allocate new products to the right stores minimizing risk, provide an accurate forecast of sales and inventory needs and consistently recommend actions that improve the business. In fact, ERS analytics (geographic maps and out-of-stock analysis) also helped this client save a \$2 million item, by showing the growth potential of the business. Once the client showed the buying team that their promotional displays were actually hurting the business in some stores, the retailer agreed to put permanent fixtures in the stores.

Enhanced Retail Solutions consultants' using our software tools enable our client to receive accurate reports quickly. And because of our flexibility, changes can be made to reflect a particular strategy- whether it be sales, marketing or planning. This has enabled our client to obtain and grow business that otherwise would have gone to their larger competitors.