Market6 Key Application Area: Space Management

Predictive Analytics can be used to better estimate what is occurring on the shelf to improve space allocation, and thereby improve customer service. As line extensions have increased, managing the allocation of product space on the shelf has become more challenging. DemandView™ can measure, model, anticipate, and correct variation caused by store behavior and promotion.

Market6 Schematic Analysis

Shelf Min: 10
Safety Stock: 6
Target Max: 16

Average daily non-promoted volume (true baseline) thru the average ODM duration
One case standard
Demand Minimum + Safety Stock

ODM Scenarios	Over Max		In Range		Below Min	
Beginning BOH	23		23		4	
Incoming Delivery	18		6		12	
Cycle Inventory	41		29		16	
Cycle Forecast	27		24		22	
Ending BOH	14 (in range)	Ending BOH	5 (below min)	Ending BOH	-6 (below min)	Ending BOH
Inventory Adjustments	0	14	-2	3	-1	-7
Market6 Suggested Order	0	14 (in range)	6	9 (below min)	18	11 (in range)
Store Actual Order	6	20 (over max)	12	15 (in range)	12	5 (below min)

Forecasted Sales (3 cycles): 73
Actual Sales (3 cycles): 72
Forecast Variance: 1.4%
Sales last 52 weeks
Average of Baseline: 5.4
Average POS Promo: 8.5
Schematic has 7 facings @ 6 units each = 42 units on hand
Recommend 5 facings

Most schematics utilize some sort of average volume estimates derived from traditional syndicated data sources. Too often this results in over or under facing SKUs, resulting in excessive shrink or out-of-stocks. Market6 can provide forecasts and historical sales data based upon True Baseline™, Turn Volume and Promoted Volume. The unique Turn Volume captures the effects of demand factors such as weather and holidays. By isolating the effect of promotional volume from turn factors, the Market6 Promoted Volume forecast is more accurate. Utilizing a combination of these volume factors retailers, manufacturers, and brokers can develop planograms with promotional flex space to ensure the right amount of product is available for everyday sales and for promotional periods, while at the same time not over or under allocating space. This information can be enhanced by analyzing actual Order, Delivery, and Merchandising cycles to optimize facings for the perfect planograms.

For heavily promoted categories, the shelf is often out-of-stock even though the secondary display may have product. So while the store may not be in an out-of-stock situation, there still may be lost sales due to the shelf being empty. The first step in correcting this is to provide an estimate of effect of display of individual SKUs, and make a determination of what items made it onto the display and what items were only promoted on the shelf. Based on the effect of display, the Market6 OPRA™ (Out-of-stock Pattern Recognition Algorithm) can determine probable lost sales caused by out-of-stocks.

Adding the probable lost sales due to out-of-stocks to actual sales provide an estimate of total demand. Comparing this actual demand estimate to the order/delivery/merchandising (ODM) schedule shows where gaps occur between delivery of the product to the store and when the product is merchandised on the shelf. Service levels and space are then set (by item, and by store) to cover the order-to-delivery gap that have been identified. This new estimate to cover demand during the order-to-merchandising gap is a much better metric to use in space management than "7 days of supply" which is the measure used to allocate space today.

Modeling estimated demand enables space management to allocate space to bridge Delivery-to-Merchandising Gaps

Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon
5	6	7	11	15	55	35	5
Order	Delivery	Merch					Order
		Order	Delivery	Merch			
			Order	Delivery	Merch		
Merch				Order	Delivery		Merch

Delivery-to-Merchandising Gap

The result of modeling demand to cover the order-to-merchandising gap will be fewer out-of-stocks, more efficient use of shelf space, higher customer service and increased sales.

For more information, contact Market6 at 925-262-8257 or email Sales@market6.com
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