Improving Performance with SKU Analysis

A Step-by-Step Guide to Creating a SKU Analysis

Accelerated Analytics ®
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Objectives

The objectives of conducting a SKU analysis are:

1. **To identify the subset of SKU's that have the highest contribution to total sales.** Sales of products are always unequal and some contribute more to total sales than others. By identifying the highest contributing SKU's, you can focus improvement efforts where they will have the largest impact.

2. **To categorize the highest contributing SKU's for use in out of stock analysis and forecasting.** As stated in other articles in this series, a key objective is to limit the amount of data that needs to be analyzed when you do item and store level planning. By identifying the highest contributing SKU's, you can limit the row counts to the number of total stores for each SKU identified. For example, if you sell one item at 1900 stores, but the item contributes a very small percentage to total sales, you can eliminate that SKU and the accompanying 1900 rows of data with minimal impact to effectiveness.

The key metrics for a SKU analysis are: units sold per store and the percentage change in units sold for the comparable prior year period. These two metrics allow for accurate cross SKU comparisons.

Key Considerations

A SKU analysis is best done by comparing units sold because it factors out the variance between the prices of different items. Otherwise, if you were comparing two items which both sold 100 units, but had prices of $5 and $15, the gross dollars will provide a misleading conclusion that the $15 item is a better seller when in fact they are selling at the same rate. However, if you are able to apply a gross margin, then dollars-based analysis can be very useful since analysis could be done on a percentage of gross profit.

Using units sold per store is useful because it eliminates the sales volume variance due to differing store counts. An alternative approach is to analyze one plan-o-gram set at a time for the stores that carry that plan-o-gram. This will hold the store count constant for analysis.

It is useful to calculate the percentage change in units sold for the comparable prior year period at a store level because it indicates if a SKU is growing or declining. When the SKU category is assigned at the end of this analysis, we will use a composite ranking of both units sold per store and growth to identify the best SKU's.

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Step-By-Step Construction

1. Determine Units Sold and Store Count

To set-up your analysis, pull a table of data for your SKU's with units sold and store count for each of your SKU's. The store count can be based on:

- Stores which sold the SKU during the two periods,
- The plan-o-gram store count, or
- Stores that sold the item or had OH indicating they had the opportunity to sell the item

In most situations, the most common method for store count will be by plan-o-gram count or by considering both units sold and OH. Choose two comparable periods, either YTD with a corresponding period from the prior year or a full year-over-year comparable. To be most accurate, use a full year of history. This SKU analysis requires comparable year-over-year sales, so new SKU's introduced during the analysis period should be eliminated. Review the data table to see if any SKU's were selling in one period and not the other and delete those SKU's. ***See Figure 1.***

FIGURE 1

SKU	2008 UNITSSOLD	2009 UNITSSOLD	2008 STORECOUNT	2009 STORECOUNT
149446	350,404	526,197	3,613	1,926
156743	354,340	490,015	3,640	1,929
126500	498,781	562,918	3,111	1,962
154787	165,356	304,218	2,040	1,904
576727	193,729	249,882	3,097	1,954
338796	162,050	213,967	3,041	1,955
126195	117,776	185,001	3,091	1,883
126551	437,531	414,515	3,107	1,959
200212	689,444	669,596	2,831	1,964
126217	74,070	104,352	3,043	1,955

2. Calculate Units per Store (UPS)

Calculate the units per store (UPS) by dividing the total units sold by the store count. Do this for both periods. The calculated UPS is the most useful way to compare the performance of SKU's across two different periods of time because it eliminates store count as a variable. ***See Figure 2.***

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