Guide to Shopping Norms

Herb Sorensen Confidential, Subject to License Agreement, Do Not Circulate! September 18, 2006 February 29, 2008 – update

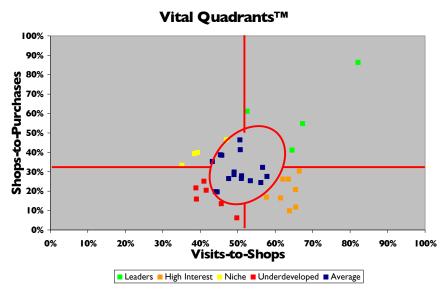
About this Document

The *Guide to Shopping Norms* is an explanation of the companion data contained in *Shopping Norms.xls.* As of this date (September 18, 2006,) this table represents a detailed picture of several hundred thousand shopping trips, selected from nine supermarkets and super-centers studied from all geographic areas of the country and representing most of the major grocery retailers in the United States. There are a few major retailers whose data is not represented in this table, even though stores from those retailers have been the subject of PathTracker® studies. The significance of this fact is that we believe that the data that is included is well representative of a great deal more shopping than might be suggested by the nine stores. Our belief is not blind, but based on the characteristics observed in dozens of stores, beyond the statistical base reported here.

Organization of the Data

The organization here is by product category, across our standard 39 reporting categories, with data reported for the principal category display, the base or gondola, (geographically contiguous displays,) as contrasted with the secondary displays, that are typically promotional displays, and are often smaller in total size but more widely distributed across the stores. We also report totals for each category. Some category data has been merged from stores where the names of the categories were the same, but there may have been modest differences in the actual composition of the categories. Also, three of the measures, location, dwell and progression, are based on five rather than nine stores. Location is indicated as the dominant of six options, but in some cases the category is diffuse enough that no effort was made to designate a single "location."

Categories themselves are divided into 5 basic groups, based on our proprietary VitalQuadrant[™] analysis. This is illustrated here:



In analyzing shopping behavior/performance, we are particularly interested in shoppers *visiting* products (Reach,) defined as coming within six feet of the item or category, and then their shopping or purchase behavior that occurs at that point. *Shopping* and *purchasing* (Sales) are best assessed in terms of the conversion ratios. That is, the conversion of visitors into shoppers (Stopping Power) and then the second conversion of shoppers into purchasers (Closing Power.)

Plotting the conversion performance of every category, visits-to-shops vs. shops-topurchases (double conversion,) allows a standard quadrant analysis. We extend this further by focusing on the peripheral categories that most clearly exhibit the behavior and character of each quadrant. This is done by designating as *average* all those categories that are within one standard deviation of the mean conversion ratios.

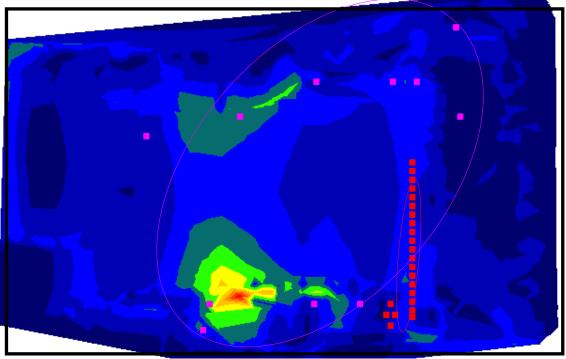
The resulting quincunx provides a convenient means of grouping categories in terms of similar performance within the stores.

Causal Factors

In addition to primary and secondary displays and the category groupings, we report other important causals as they are found across stores. These include:

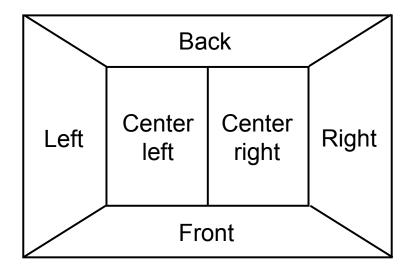
• *Lineal feet* – which is a measure of the size of display provided for the category within stores.

• *Area* – is the share of the store, on a percentage basis, that is blanketed by the category. This is illustrated for one category as follows:



Here we see the main display of the category, on and near a gondola, each four foot display indicated by a red square. Our data reports this both in terms of the total lineal feet, but also the *area* of the store floor space that is "covered" by the display, in this case probably about 1% of the total store floor space. On the other hand, putting a probability ellipse around all of the secondary displays shows that those probably cover around 40% of the floor space area, in terms of their *total probability of intersecting shoppers across the store*.

• *Location* – of the majority of the displays is reported in terms of our standard geographic sector divisions of the store. For our reporting here we use the largest geographic segmentation (other than the total store itself) as follows:



Each store is statistically divided into six equal area sectors, based on the floor space where shoppers can walk. These six are designated as front, back, left, right, center left and center right. (A detailed sub-sector system allows more refined specification of locations.) This is crucial in understanding the absolute placement of categories, but also in relating categories in terms of adjacencies, etc.

- *Dwell* (Holding Power) represents the average number of seconds that shoppers spend in the category, *if and when* they visit it.
- **Progression** refers to the point in their trip when the shopper typically visits the category averaged across their visits, if they visit it multiple times in the trip. This is expressed on a decile of their trip basis. In other words, a progression of 3.0 would indicate that the typical shopper visits the category at the point that 30% of their shopping trip is complete. The fact that most categories average across stores around 5.0 progression, is simply a consequence of the fact that for every placement early in the shopping trip by one store, another store offsets the category by placing it late in the trip. This means that *any* deviation from an *average* progression of 5.0, probably represents significant consistency in the trend of grocers in terms of placement of that category early or late in the trip.
- *Variation* in these tables is represented as , or statistically, one standard deviation. The variations are quite large in comparison to the averages, which is a reflection of the large variability in store design and merchandising. The average plus or minus one standard deviation typically encompasses two thirds of the range of values, for a normal distribution. The very large variations, are also a consequence of the "non-normal" nature of most of these distributions.