Supermarket Use Case

Supermarkets are a key retail segment. However, the segment has been under siege as “big box” retailers such as Walmart and Target expanded into selling grocery items, fresh vegetables and meats in their “Super Walmart” and “Super Target” versions. Sam’s Club and Costco also have impinged on traditional supermarkets by offering “supersized” packages of grocery items at value prices. Several supermarket chains have disappeared as shoppers became more price conscious and switched allegiances to the big box competitors and club stores. Supermarkets had prided themselves into thinking that they are destination stores and that all shoppers buy when coming to the stores. However, since there are alternatives to the supermarkets, shoppers are more and more likely to be seeking specific items at supermarkets and leave without purchasing if they cannot find the products that they want.

In order to compete with the big box and club store retailers, supermarkets must know who their customers are at a local level and be conscious of key metrics such as conversion rate to make sure that they are converting shoppers into buyers.

CountBOX offers a complete shopper analysis solution for supermarkets using unobtrusive observations to provide actionable analyses and data for supermarkets. CountBOX’s system addresses who the supermarket’s shoppers are, where they go in the store and key operational metrics to improve supermarket operations.

CountBOX is one of the only shopper analysis companies to offer shopper profiles at the local supermarket level using facial recognition technology. Using security cameras pointed at doors or by installing facial recognition sensors, CountBOX provides supermarkets the following demographics on their local store shoppers:

* Age category
* Gender
* Ethnicity
* Mood of the shopper

This demographic data is invaluable in localizing the products offered to specific shopper groups by store.

Using WIFI technology, CountBOX is able to determine where shoppers go in the stores and how long they stay. CountBOX is able to provide the supermarket management:

* Heat maps by time period to show high and low areas of traffic within the store
* Dwell time reports showing average time spent in the store by day part
* When coupled with door counters, CountBOX can estimate the percentage of shoppers visiting different areas in the store such as the deli or meat counters
* Traffic patterns within the store yielding information for providing impression estimates for in-store digital and other signage

Finally, CountBOX provides supermarkets key performance indicators based on shoppers and sales transactions. Shopper traffic is a key metric that provides insight into the actual number of shoppers entering and exiting the supermarket. Shopper counting devices or sensors placed above the doors of a supermarket provide the actual counts of shoppers – 24/7/365. CountBOX time stamps shoppers as they enter and exit the store. Therefore, a distribution of the number of shoppers by time period is developed for the store. A store manager may determine the number of shoppers entering the store by half hour, hour, “4-hour shift” or the total day. Shopper traffic measurement allows for the determination of “peak traffic hours” within a week. The manager is able to schedule enough staff to cover these key times to convert shoppers into sales.

When the shopper traffic data is merged with supermarket point of sale (POS) data, other key metrics are calculated. One key metric is conversion rate or total transactions divided by shopper traffic:

Conversion Rate = Total Transactions

Shopper Traffic

Conversion rate provides the percentage of shoppers that actually make a sale. Conversely, the percentage of customers that do not buy is (1 – conversion rate). These are the customers that the supermarket needs to convert to improve its sales. For an average supermarket store, the conversion rate ranges from 40% to 80%. Therefore, between 20% and 60% of shoppers in a supermarket do not make a purchase. Knowing the conversion rate allows the supermarket chain the opportunity to do root cause analyses into why a large proportion shoppers do not purchase. Alleviating the causes of not purchasing will increase conversion and consequently sales.

Measuring shopper traffic allows the supermarket to determine what the value of each shopper is to the store by calculating the dollars per shopper metric.

Dollars per Shopper = Total Sales

Total Shopper Traffic

The dollars per shopper metric is calculated on a time period such as a day, week, month or year. High “dollars per shopper” reflects high conversion or high average ticket, while low “dollars per shopper” reflects low conversion and/or low average ticket.

In supermarkets, staffing levels have a direct impact on sales. Customers do not want to wait in long lines at the deli counter or to check out. Conversion rate tends to vary based on the amount of traffic in the store and the number of staff members that are present to serve them. Another key traffic-based metric can be calculated – the shoppers to staff ratio:

Shoppers to Staff = Number of shoppers in the store

Staff present to serve shoppers

The shoppers to staff ratio may be calculated for different time periods, but the most useful measure is at an hourly level. In general, the lower the shopper to staff ratio, the more likely that shoppers will be converted to customers (sales) as enough staff will be available to wait on customers to avoid long lines.

Using the shopper traffic distribution for the week, peak traffic hours and the shoppers per staff ratio, the store manager is able to efficiently schedule staff to meet the demand of shoppers. Historically, Tuesdays and Wednesdays are low traffic days. Therefore, the store manager needs to schedule fewer staff to cover the traffic. Weekends (Friday, Saturday and Sunday) tend to be the largest traffic days for supermarkets. Store managers should schedule more staff on these days. Saturday and Sunday tend to have the most “peak shopping hours” for supermarkets within the week. Store managers may need to schedule or switch additional staff to cover these peaks in shopper traffic and potential sales.

These metrics help the store managers and their leadership to improve store operations and create additional revenue at the stores.