

Markdown Management at a Major Department Store

The Challenge

One of the largest and oldest department stores in the US sells a range of national and private label brands across several categories in a few hundred stores and has to compete with offline and online stores and outlets. As in most other stores, a significant portion of items are sold at a price lower than the original ticket, due to markdowns and promotions. Markdowns refer to permanent price drops, while promotions are temporary price reductions. The company is concerned about its markdown policy, and believes that it is the main cause of less than expected revenue growth. Optimizing markdown schedules is especially important during high-traffic seasons, and the company's managers believe that revenue is left on the table under the current markdown policy. A markdown policy determines not only which items to mark down, but also when, and by how much. Each individual store has a markdown budget and its manager is responsible for making decisions regarding the item in the store, which implies a manager needs to make markdown decisions for hundreds of items. While items can go through more than one round of markdowns, the company is mainly concerned with the initial markdown, since there is a strong belief that the initial markdown has the largest effect on revenue. The company wants to better understand the impact of its markdown policy and whether a change in markdown policy can increase revenue.

The Solution

A statistical analysis of historical data was conducted and discussions were held with a number of store managers. It became clear that the success of a markdown policy depends strongly on two factors: the length of an item's lifecycle and how well the item is selling at its ticket price. While the length of an item's lifecycle is usually known at beginning of a sales period, how well the item sells at its ticket price needs to be estimated based on early weeks of sales.

The Benefits

Understanding the factors that impact the success of an item's markdown allowed the company to adjust and enhance its markdown policy, which resulted in a substantial increase in revenues. It also prompted the creation of guidelines for price testing, especially in the early weeks of sales (after the introduction of an item or after the markdown of an item) and helped in developing a standard measure for comparing different stores and their success in generating revenue by effective markdown policies.

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