Assortment Optimization At Large Catalog Company: SKU, Pricing, Mix, And Placement Rationalization

The Challenge: A large catalog-based consumer products company had been recently purchased by a PE firm in a hotly contested auction (Gotham had conducted operational due diligence). Although the company had historically seen high growth rates (sales more than doubled in last 6 years), the top line was starting to flatten out. During an earlier post-acquisition engagement with CatalogCo to optimize inventory, Gotham had found SKU proliferation to be a significant issue. Further analysis by he company management and Gotham showed that SKU and ad spend productivity was declining due to over-assortment, and ad spend could be optimized to reduce costs by 10% (over $10MM). In light of the findings, he company management began a top-down approach to reduce catalog page counts and asked Gotham to help optimize SKU assortment in a disciplined, strategic, and expedited manner to allow further reduction in ad-spend without affecting top-line.
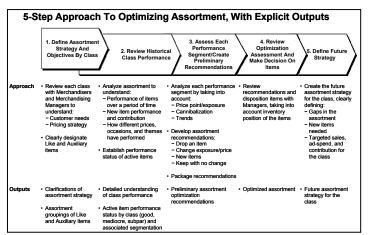
The Partnership:

Analysis: Gotham launched the assortment optimization effort as a pilot with the client participants being 4 merchandisers representing both long-tenure personnel and recent hires.

The pilot team effort revealed that system reporting was catalog-centric and the SKU data and classification in the company's system was not representative of how merchandisers thought of product categories. To rectify this situation, step 1 was to re-categorize SKUs into more logical product categories and build category-focused performance reports that facilitated decision-making and assortment actions. We reclassified some 100,000 SKUs sold in last 4 years into ~500 product categories reflecting the merchandisers planning process, using algorithms and then working with 20+ merchandisers. Simultaneously, we worked with the IT group to capture historical sales data by SKU, by business unit, by month (over 4MM records) so that we could create actionable reporting.

Armed with the reclassified product structure and sales data, the Gotham team built category-specific performance reporting, including: (1) historical sales/profitability/ad spend analysis by price point, by occasion, by theme; (2) SKU segmentation by performance bucket (good, mediocre, subpar); and (3) cannibalization analysis. This reporting revealed that:

- Less than 25% of SKUs accounted for 90% of the contribution margin and 65% of ad-spend
- Around 30% of new items performed poorly and only 5-10% became good performers over time (in direct contrast to management's thinking that growth came from introducing new items)
- There was high correlation between growth in number of items (which had more than doubled in past 4 years) in the assortment and SKU performance decline over the same period.

Strategy: In order to instill an assortment mindset and transition the merchandising department from item pickers to category managers, the Gotham team developed a methodology to help merchandisers better understand performance and make item-specific decisions to either drop the item, increase/decrease exposure (to reduce cannibalization), or increase/decrease price to enhance performance of their assortment. This methodology included a detailed management review ahead of recommendations being implemented, and the process created a real-time training ground for merchandisers to help enhance their capability. After then piloted and refined this methodology ahead of roll-out.

Execution: The assortment optimization process was rolled out to all the merchandisers. To train the merchandisers on the new methodology and help build their strategic merchandising capabilities, we worked closely with them on analyzing and optimizing first 2-3 classes and led the manager review sessions (~3-4 hours per class). In addition, we worked with the merchandisers to facilitate report creation, the uploading of merchandisers' disposition recommendations, validation of the assortment plan, and modeling to ascertain class-level financial impacts, including: sales and contribution impact, page count impact by catalog, and SKU reduction impact. On finalizing the optimization plan, these anticipated impacts were reviewed with the management team.

The Outcome: After the merchandisers' recommendations were reviewed and agreed-on by the management, $6.7MM total achievable savings was calculated (on top of savings already being realized through management's current top-down initiative).