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Pricing and promotions: The analytics opportunity

Many retailers underestimate the value of coordinating decisions on pricing and promotions. A new analytics approach can help.

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The scenario is a familiar one to e-commerce retailers: a supplier increases prices on an item, so a category manager increases the item's selling price. But this effort to make sales of the item more profitable is promptly undermined by a well-intentioned marketing manager, who lowers the price of the item by 20 percent as part of a promotion.

Such uncoordinated and counterproductive decisions happen much more often than most retailers realize, and they are expensive. Many promotions don't turn a profit at all, or at least they don't add nearly as much profitable revenue as retailers expect. Addressing this conflict can quickly turn into a game of cat and mouse, in which retailers find themselves constantly chasing the next issue in a highly reactive way. Sometimes they simply avoid the problem by keeping prices low or making small adjustments across the board, in effect creating a permanent discount on their entire assortment.

With better analytics, though, e-commerce retailers can create value by intelligently linking pricing and promotions based on optimal price setting and promotion design. We have observed, for example, several innovative e-commerce retailers increase revenue and profits by three to five percentage points using a highly differentiated analytics process and often achieve improved customer satisfaction and loyalty as well.

Companies that effectively and profitably link pricing and promotions through advanced analytics engage in the following three-step process, which first determines customer price sensitivity, then gauges the likely effectiveness of promotions for every product, and, finally, links the two:

1. Use a wider range of factors to determine price sensitivity

A price-sensitivity score considers the extent to which customers perceive a product's price and, as a result, react to price changes. If a product has a higher price-sensitivity score, it means that a customer is less likely to accept a price increase. In this case, the price should be kept at a competitive level. (For more on dynamic pricing, see "How retailers can drive profitable growth through dynamic pricing," on McKinsey.com.)

While most companies consider price sensitivity when they make pricing decisions, the scores often don't incorporate enough factors and thus aren't as accurate as they could be. The best price-sensitivity scores are calculated with advanced analytics, using input factors that take customer, competitor, and company considerations into account. For instance, price elasticity is based on different models for each product category, because customer behavior, including purchase frequency and reaction to price changes, differs for each product. By aggregating individual input factors for price sensitivity and promotion affinity, individual scores for each product category can be developed. With price sensitivity identified for all products, items are then grouped into three buckets based on their scores:

— *Key value items: top sensitivity.* These are everyday products, such as common grocery items, whose prices most customers know, making it easy for them to comparison shop. As a result, customers are especially price sensitive when it comes to these products, and their prices must be competitive. These products typically account for 10 to 20 percent of a retailer's sales. Investing in keeping their prices low pays off in significantly better customer price perception, which leads to more frequent visits and larger baskets.

— *Foreground items: midlevel sensitivity.* These are items that have attributes that are more important to customers than price and hence do not require as great a degree of competitiveness in pricing as key value items. However, their prices should be competitive enough to avoid any negative impact on customers' price perception. Prices for these items can be set within a range that falls between, for example, the highest and lowest competitor prices, or the minimum margin and recommended retail price.

— *Background articles: low sensitivity.* The items in this bucket are either products for which price is not an attribute that customers focus on much at all, or products for which a price comparison isn't possible. Correspondingly, the products in this bucket offer the strongest opportunity for retailers to finance their investment in low prices for the key value items.

2. Build a clearer picture of where to target promotions

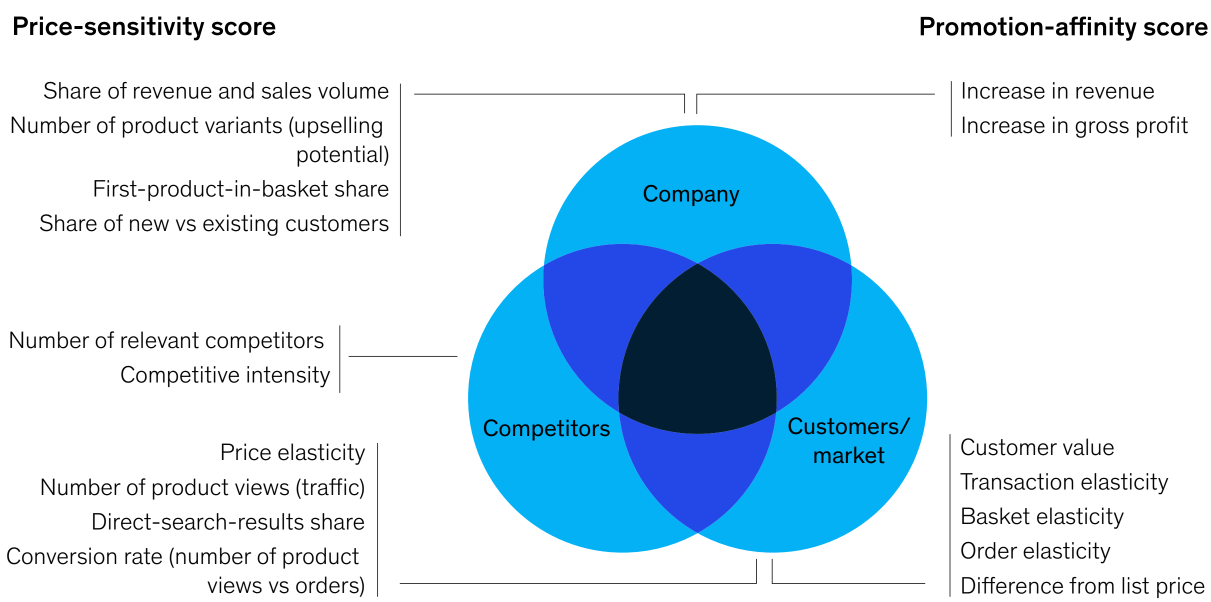
Similar to the way they improve the accuracy of a price-sensitivity score, retail leaders need to rethink how they score promotions to better understand their impact on a particular product's sales or profits.

Promotion-affinity scores primarily measure the impact of earlier promotions in terms of transaction- and customer-based success factors and basket composition. The most important are increases achieved in revenue and margin. Depending on the specific situation, retailers can adjust the relative importance of five other factors: customers' willingness to buy the product without a promotion, the increase in the number of transactions due to discounts, volume purchased of the product promoted, basket product variance, and any changes in buying behavior, such as more frequent store visits or larger baskets (Exhibit 1).

Finding the right path through this complexity requires two things: an overview of each relevant key performance indicator (KPI) that needs to be understood, and a way to express the cumulative results of all relevant KPIs. This cumulative KPI—or "total customer effect" (TCE)—shows how much additional revenue or margin a promotion accounts for by looking at what additional sales (or gross profit) it generates and whether it actually brought more customers into the store or increased the value of their baskets.

Exhibit 1

A variety of input factors can be used to determine each product's precise price sensitivity and promotion affinity.



Source: McKinsey analysis

3. Optimally link prices and promotions

To make better pricing and promotions decisions, companies need to then combine both scores in a price-promotion matrix so that an optimal balance can be identified for each product being sold (Exhibit 2). Products are then placed into one of four quadrants of the matrix:

— *High price sensitivity and high promotion affinity.* Retailers using this approach respond to consumer sensitivity regarding prices for these products with a "low-low" approach—that is, both setting the lowest prices possible and maximizing discounts. Also, they focus promotions on products in this category that specifically help to increase frequency of purchase or basket size.

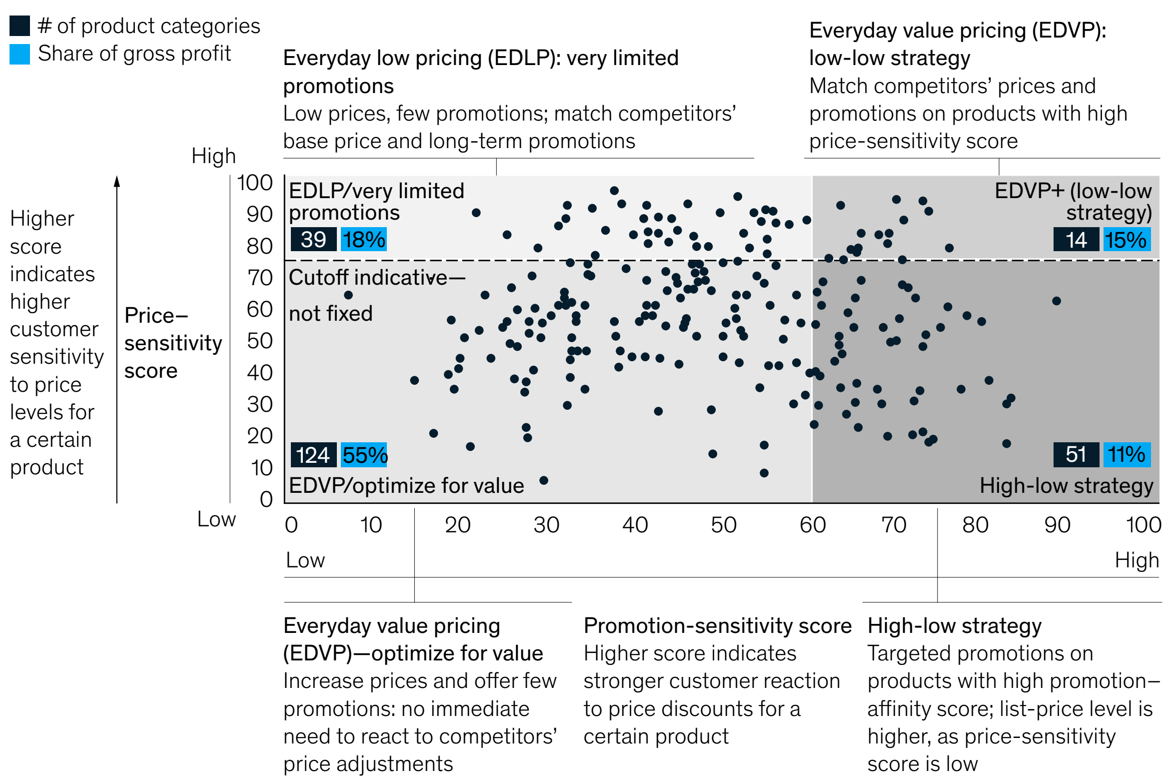
— *High price sensitivity and low promotion affinity.* For these necessity-type products, leading retailers use a strategy of keeping regular prices low, at a level below the recommended retail price but above what a promotional price would be.

— *Low price sensitivity and high promotion affinity.* These occasional purchases are given a "high-low" strategy, with prices that are close to the recommended retail or highest competitor prices but with discounts that lower promotional prices as much as possible. Leading retailers also vary promotion type, mix, and frequency, and they focus on product categories with high promotion affinity.

— *Low price sensitivity and low promotion affinity.* Leading retailers generate additional value with these products by increasing the margin earned on them. They price these items close to their highest competitors' prices, and they reduce or stop promotions on them.

Exhibit 2

A price-promotion matrix identifies the optimal balance of pricing and promotion for each product being sold.



One international online retailer's efforts to closely link pricing and promotion decisions indicated a potentially quick payoff as soon as the first pilot phase was completed. Previously, the retailer sold about 80 percent of its assortment below the list price. Pricing required significant manual effort and was rarely transparent, which was a recipe for employee frustration. A lack of coordination with promotions not only created additional work but also caused the company to leave revenue and profits on the table. Also, the retailer wanted to build customer trust into its pricing and to boost perception of its brand, so an important aspect of its initiative was to design prices that would be consistent from the customer's perspective.

The team first tested the approach in five product categories in a single country for periods ranging from four to six weeks. After this pilot phase was concluded successfully, the bulk of the results were carried over to other categories and countries and optimized further. Motivated by this success, the retailer has since launched a pricing-and-promotions transformation across other products and countries. As a result, the company expects its sales revenue to increase by 3 to 5 percent and profits to grow by two to four percentage points over the three years following implementation of the approach. Also, its brand position has already improved and is far less dependent on discount promotions.

Three prerequisites for success

In our experience with a number of programs for integrating pricing and promotion management, three areas play an especially large role in determining whether retailers' plans succeed:

— *Strategy and implementation.* Leading retailers initially leave it to top marketing management to decide whether to set more consistent prices, reduce both the number of promotions and associated discounts, and design an overarching pricing and promotion strategy. Once that is done, they look to boost coordination across product categories and regions to anchor the new strategy throughout the organization. To make this happen, they ensure that every employee involved—whether they work in pricing, sales, analytics, or product or category management—has access to the pricing and promotions scores. They also put the same incentive system in place for everyone, to avoid potential conflicts between, for example, category managers who benefit from higher sales and their marketing counterparts who want to see higher margins.

— *Data and resources.* As retailers scale up this approach, data availability and quality become increasingly important. Strongly differentiated transaction histories are also essential for activities such as price analyses at the SKU level. At the same time, updating data is time consuming and expensive. Gathering and consolidating data takes people and systems with the right capabilities to glean, analyze, and translate the results, and such efforts must often compete internally with other digitization projects. It is therefore critical that managers make this topic a priority, invest enough in its implementation, and get needed employees on board.

— *Culture and mindset.* Any retailer working to develop, test, and broadly launch a new approach to pricing and promotions will encounter many obstacles. The available data will never be perfect, and no model used as a starting point will meet every one of a company's needs. Companies that have a clear willingness to test and learn will find it a big advantage. Involving the different stakeholders early on is also essential, to be sure they understand, question, adapt to, and stand behind the models as they develop. As with all change, this level of engagement is the only way to ensure that employees across departments accept the new methods and are equipped to use them.

While these success factors and the skills to apply analytical methods and tools are vital, they don't add up to a new pricing-and-promotion strategy on their own. In our experience, retailers find that such an overarching strategy emerges only from the mixture of science and art that takes place when analytical approaches are combined with individual managers' capabilities and experience.

As these new methods find increasing use in the future, opportunities to apply them will continue to expand—including to areas where links between pricing and promotions are still uncommon today, such as brick-and-mortar retail.

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