

Marketing & Sales and Retail Practices

The dos and don'ts of dynamic pricing in retail

Dynamic pricing doesn't have to be extraordinarily complex, but it does have to be strategic and disciplined. Here's a checklist for retailers.

This article is a collaborative effort by Sara Bondi, Maura Goldrick, Emily Reasor, Boudhayan Sen, and Jamie Wilkie, representing views from McKinsey's Marketing & Sales and Retail Practices.



Over the past year, as homebound consumers placed online orders for everything from groceries and soap to yoga mats and laptops, many people were reminded of how easy it is to comparison shop on the internet. With just a few clicks, a shopper can find out which retailer sells a particular item at the lowest price. And because the shift to e-commerce is expected to continue even in the postpandemic era, pricing will become an increasingly important competitive tool for retailers. Dynamic pricing, in particular, is poised to become one of the core capabilities that sets winners apart in the retail landscape of the future.

Simply put, dynamic pricing is the (fully or partially) automated adjustment of prices. It's a staple of the travel industry: dynamic pricing is the norm for airline tickets, hotel rooms, and ride-sharing services. In e-commerce, Amazon has long been a leader in dynamic pricing; the company reprices millions of items as frequently as every few minutes. But dynamic pricing isn't just for travel companies or e-commerce giants, and it doesn't necessarily require ultrasophisticated software that changes every product's price multiple times a day. Even traditional retailers can reap tremendous benefits from merchant-informed, data-driven algorithms that recommend price changes for selected products at some level of frequency.

Despite the competitive advantage that dynamic pricing can confer, few omnichannel retailers have developed this capability. Some are only now starting to explore the potential of dynamic pricing. Other retailers conducted half-hearted and poorly planned pilots that, unsurprisingly, had little impact and thus failed to get the organization's buy-in.

Drawing on our experience working with retailers of varying sizes across the range of subsectors, we've identified critical yet often overlooked imperatives and pitfalls that should be top of mind for leadership teams deploying a dynamic-pricing strategy. There's no one-size-fits-all approach, but close attention to the following dos and don'ts can dramatically boost a retailer's chances of success.

Winning elements (the dos)

Retailers that have benefited from dynamic pricing have generally abided by the following rules: focus on the "out the door" price, consider consumer expectations, test and refine your strategy, and plan your journey.

1. Focus on the out-the-door price, not the item price.

Shoppers don't just look at the ticket price of an item they want to buy. Instead, they base their purchase decisions on the total out-the-door price, which includes taxes, shipping costs, service charges, and any additional fees tacked on to the total price. Your dynamic-pricing strategy must therefore reinforce your chosen value proposition. That means making thoughtful choices not just about ticket prices but also about promotions, bundles, personalized offers, and shipping times and fees.

A furniture retailer, for instance, tested lower delivery fees and longer delivery times on the hypothesis that customers don't necessarily want their new furniture delivered right away; they'd rather get their new dining table on a Saturday, for example, than in the middle of the week. The retailer found that a longer wait didn't significantly affect conversion rates and gave the company the flexibility to optimize deliveries for capacity and cost. Algorithmically offering the option to wait until the weekend for specific items and then passing the savings on to the customer turned out to be an effective way to drive additional conversions.

2. Consider consumer expectations. Certain items are better candidates for frequent price changes than others. In apparel, for example, prices of on-trend fashion items can change from week to week, but prices of basics (such as plain T-shirts or underwear) should generally stay more stable. (Customers who have been buying white crew socks from your stores for years shouldn't get sticker shock when they come back to buy another pair.) Carefully consider the length of the purchase cycle as well as consumer expectations for each product set. Prices of big-ticket items that tend to be heavily researched by consumers—such as TVs or sofas—

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should remain relatively stable, since frequent price changes may frustrate the diligent consumer who has been doing research for months.

In our view, all dynamic-pricing algorithms should be merchant informed, and most price changes recommended by algorithms should be merchant approved before they're implemented. That way, retailers can avoid the consumer backlash that comes with seemingly opportunistic price hikes. In the past year, for instance, retailers that raised prices on cleaning products were seen as taking advantage of the COVID-19 pandemic and gouging consumers—and thus lost customer trust and loyalty.

3. Test and refine. Dynamic pricing is both art and science, which means that a test-and-learn approach is crucial to getting it right. To manage risk, align with your CFO on a “war kitty” and agree on the direction of price changes during the initial test phases. Start with pilots in just one product category or region. Assume that the first few price moves won't succeed; establish an approach for tracking progress, measuring the impact, and making quick adjustments. Invest time with merchants during the initial tests and work with them to formulate next steps before transitioning to automated price-change approvals.

At a high-end accessories retailer, for example, pricing analysts worked alongside merchants

to embed the logic of its pricing strategy into algorithms. The retailer then conducted in-market testing to derive two critical inputs. The first was the limits of substitution across price tiers for very similar products—for instance, the retailer found that most customers interested in a \$350 item upgraded to a similar item priced at \$399, but not when the more expensive item was priced at \$400. The second was the customer response to bundled offerings. For example, when the retailer bundled two items typically bought together for an out-the-door price of \$499, customers paid attention only to the price of the bundle; they didn't even notice price changes on the individual items. The retailer's new pricing strategy increased absolute earnings before interest, taxes, depreciation, and amortization (EBITDA) in the test categories by more than 50 percent and led to an automated price-setting system for 500,000 SKUs.

4. Plan your journey. As a foundational step, seek to understand your current competitive position in the market and consumers' price perceptions of your brand. Then, map out your dynamic-pricing journey. Given most retailers' starting point, reaching the end-state goal will almost certainly require a phased approach to building and assembling best-in-class data, infrastructure, tools, and talent. Don't expect to get there overnight. Set and manage internal expectations; demonstrate quick wins to bring the organization along.

Pitfalls to watch out for (the don'ts)

When implementing dynamic pricing, the common mistakes that retailers make include the following: introducing prices that alienate customers, changing prices too frequently, and relying on bad data.

1. Don't insult the customer. Consumers expect airfares to change constantly, but they expect the price of a jar of pasta sauce or a bottle of shampoo to stay fairly consistent. Ensure that all algorithm-recommended price moves are aligned with your brand and with the desired customer experience. Establish and enforce strict pricing guardrails. Your prices shouldn't fluctuate so dramatically that they confuse and alienate customers. If customers perceive price changes as random, unfair, or disconnected from your value proposition, they'll simply shop elsewhere.

Prices should also display consistently across devices or channels. Many retailers, for example, ask online shoppers to enter a zip code before showing prices on their websites. The goal is to ensure that customers who visit both the online and offline stores will see commensurate pricing. Your customer may already have expectations about good, better, and best variations (or pricing architectures more generally); in fact, your own pricing approach may have trained them. Sudden changes that violate those norms are likely to cause confusion and, potentially, attrition among customers.

2. Don't change prices just for the sake of changing prices. The specific triggers for price adjustments can differ substantially across retailers and customer purchase occasions. In some categories, seasonal changes or upcoming competitive product launches are justifiable triggers for price moves. But if costs, availability, competitors' prices, or other demand drivers aren't changing, there's no need to

change product prices, either. A grocery retailer, for example, developed a segmented pricing strategy: prices for key value items, like milk and eggs, changed weekly, based on inputs such as the retailer's costs and competitors' prices. However, prices on other items, such as packaged foods, remained stable, since the underlying inputs typically remained unchanged from week to week.

Another seemingly obvious tip: don't forget to tell consumers when you've lowered prices. A discount retailer reduced pricing on several key items but didn't advertise that fact, so consumers barely noticed, and the price reductions were for naught.

3. Don't let bad data dictate your pricing. Today's technologies enable accurate, centralized pricing management and the rapid publishing of price changes, but bad inputs will cripple even the best dynamic-pricing strategy. For example, product costs, shipping fees, and customer-service data are often amortized across multiple SKUs, but in reality they affect the economics of individual products very differently. Underestimating shipping costs for bulky items or fast delivery creates an artificially attractive margin profile, and algorithms might recommend reducing item prices in such cases—but these price reductions, if implemented, could result in big margin losses. A prioritized cleanup of pricing inputs for high-value items—and greater granularity and accuracy in the attribution of costs—can significantly improve price recommendations.

As more people do more of their shopping online, retailers would do well to get serious about building their dynamic-pricing capability. Otherwise, they could soon find that they've fallen too far behind more forward-thinking competitors.

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