McKinsey & Company

Retail Practice

Pairing advanced analytics with intuitive tools to transform retail markdown management

A measured approach to pricing during the clearance cycle could be worth millions of dollars to retailers.

by Sara Bondi, Jason Cherok, Rich Fox, and Ian MacKenzie



Retailers face a multitude of challenges when it comes to pricing during the clearance cycle (Exhibit 1). Merchants are under tremendous pressure to both improve margins and manage inventory, but they often use a "peanut butter" approach—using the same pricing strategy across a range of products-regardless of item or storelevel performance. This thinking is usually driven by a lack of clarity about the approach or a lack of data or tools that would make pricing during the clearance cycle more effective and efficient.

In this article, we lay out a vision for an approach to markdown management many retailers need, and we address the common questions that naturally arise when thinking about how to bring this approach to life. In our experience, this approach typically generates four to eight percent in markdown margin rate improvement—potentially worth millions of dollars to the bottom line—with relatively quick time to impact (12-14 weeks).

Four critical questions underpin bestin-class markdown management

Retailers should pay close attention to a few factors related to making decisions about clearance items.

- What items should be put on clearance, given their performance during the season?
- Where should the items be put on clearance, given performance across their footprints?
- When should the items be sent to clearance to balance the markdown budget and achieve margin impact and sell-through targets?
- How deep should the clearance price be to achieve the margin and sell-through goals?

The 'what' and the 'where'

Identifying the right items to mark down and where to mark those items down is grounded in the ability to visualize the item's performance in the current season compared with its plan. By aggregating in-season item performance data with the item's plan in a simple visualization tool, merchants can visually identify "stars" and "dogs" in the portfolio. As a result, merchants can detect which items are performing well and can be held back from clearance, and detect underperforming items that should be sent to markdown more quickly in order to maximize margins across the product set.

Exhibit 1

Pricing during the markdown cycle is often both ineffective and inefficient.

Ineffective pricing



Little or no visibility to sell-through or inventory positions, limiting ability to assess best items to send to markdown



Store groupings (eg, climate zones, localization clusters) are largely static, with no ability to surgically mark down



Markdown impact estimates rely heavily on recent data and merchant assumptions; little advanced or consumer-centric analytics to determine the best clearance price

Inefficient approach



No ability to incorporate business rules (eg, number of marks, distribution of 1st mark levels, brand-level guardrails); requires manual overrides



Highly manual reporting, Material delays in with limited information and insights, that requires significant time commitment

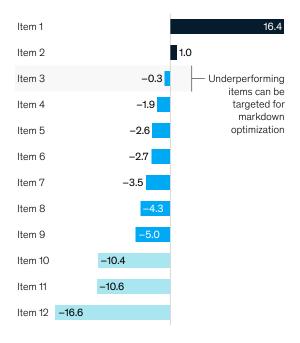


processing time as a result of complex and antiquated systems and/or reliance on third-party vendors

Exhibit 2

Segmenting products at the store level enables merchants to understand pockets of underperformance.

Example visualization of performance gap, %



Similarly, the segmentation of items can be executed at the store level, which enables merchants to understand pockets of underperformance across the store network in custom groups, such as assortment tier or climate zone (Exhibit 2). After visualizing performance, merchants have a clear understanding of what items to mark down and where those items should be sent to clearance.

The 'when' and the 'how deep'

Setting the optimal clearance price requires leveraging consumer-centric analytics and configured business rules from merchants and planners to set the right discount level (Exhibit 3). For the items identified by merchants through the visualization, an optimal clearance price can be identified using easy-to-use tools to optimize

gross margins and sell-through, subject to a set of business rules or constraints.

Consumer demand analytics are then utilized to predict the expected sales pattern and financial impact of executing the optimal clearance price. This "accessible" advanced-analytics approach builds conviction and transparent logic merchants and planners can test before taking action. Merchants and planners can use these analytics to run scenario analyses on the prices and timing of markdown to maximize their overall goals.

Building sustainable impact through a people-driven approach

Retailers should be cognizant of common barriers to adoption when implementing a new process and any big data and analytics tool that goes along with it. Data can be incomplete or inaccessible, and there are varying levels of excitement among employees in adopting a new approach.

For employees with a lack of knowledge or comfort in analytics, it is critical that the tools merchants use be simple and intuitive to ensure adoption. We have opened the aperture of the breadth of analytics that teams can perform to better understand the consumer and trends in the business, and have built these tools with the end user in mind by designing backward—showing what they need to know and running the advanced analytics in the background.

As we work with the organization to operationalize, scale, and fully transfer ownership of markdown management, we ensure that the new process is embedded to enable maximum value capture. There are a few markers of success:

- pinpoint elements of existing processes that need to change to incorporate the right touchpoints and decisions
- identify an executive sponsor who conveys support, sets targets, and role models the behavior of data-driven decisions versus intuition

Exhibit 3

Sustainable impact is supported through a standard process.



- engage all areas of the business—including business intelligence, engineering, data science, merchant and planning, and central pricing to achieve the set of targets and to be liable for tracking to the key performance indicators
- set early goals of running pilots to prove impact while continuously refining the approach to increase buy-in and adoption

Markdowns can be optimized through intuitive tools grounded in advanced analytics (Exhibit 4).

Too often, retailers take a peanut-butter approach to clearance pricing, which leads to suboptimal margin generation and sell-through. Markdown management aims to answer four questions: what, where, when, and how much to markdown. The ability to source, integrate, cleanse, and aggregate large data sets is becoming a commodity. Using accessible tools that support advanced analytics will ensure that the right prices are set and the desired impact is achieved. New processes and operating models should be put in place to ensure sustainable adoption.

Exhibit 4

By optimizing markdowns, retailers can drive impact quickly.

Example cases

	Wholesale	Specialty
Background	 Wholesale primarily with other secondary channels (eg, e-commerce) Company built from the ground up; most merchandising decisions made by intuition Experienced exponential growth that has recently slowed Faced significant inventory issues Over 25% of sales sold on clearance 	 Historically high inventory levels and lack of a standardized markdown logic resulted in frequent markdowns and loss of margin Planners had flexibility on when to take their styles to markdown and depth of price change Up to 30% of sales sold on clearance
Approach	 Co-built the approach to markdown management with the central pricing team Embedded the approach into the client's infrastructure Ensured sustainable adoption by "training the trainers" and collaborating with merchandising, planning, business intelligence, finance, etc 	 Collaborated with planners to understand existing pricing logic and processes in place Introduced econometric modeling to calculate markdown prices Codeveloped markdown model with planners to ensure high adoption Transitioned client team beyond looking at inventory on hand to using a holistic analytical approach
Impact	 Successfully piloted approach in set of ~50 stores Achieved 4–5% markdown margin improvement in 1 year 	- Achieved 4–8% markdown margin improvement

Sara Bondi is a consultant in McKinsey's Pittsburgh office, where **Jason Cherok** is an associate partner; **Rich Fox** is an associate partner in the Chicago office; and **Ian MacKenzie** is a specialist in the Denver office.

Designed by Global Editorial Services
Copyright © 2019 McKinsey & Company. All rights reserved.