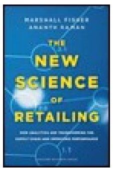

The New Science of Retailing: How Analytics Are Transforming the Supply Chain and Improving Performance

by Marshall Fisher and Ananth Raman

Conclusion: The Way Forward

Overview

September 2008, when Lehman Brothers declared bankruptcy, marked the beginning of the worst economic crisis many of us have seen in our lifetimes. Panic on Wall Street quickly spread throughout the rest of the economy, including into retailing. Same-store sales crashed, and that, coupled with difficulty in obtaining credit, drove many retailers into bankruptcy or to its brink. Even healthy companies had to make deep cuts, finding ways to shore up operations while preserving their brands and store experiences. As our friend Jim Halpin, former CEO of CompUSA and a veteran of many turnarounds, told us, “The secret in managing through a crisis is to survive the short term without doing things that will destroy your long term.”

As we have discussed the crisis with colleagues in academia and retailing, a common view has emerged: yes, the economy will recover, but the postcrisis world will be different in significant ways. We will reach what many are calling a “new normal.”

In this conclusion, we’ll provide suggestions of what the new normal may be like and how retailers may need to adjust their strategies as a result. But even in a new environment, the ideas of this book should remain useful. They’re especially helpful, even vital, in the troubled economic conditions that are likely to persist in the near future.

Rocket science retailing may be easier to implement today than it was when the economy was booming, and stock and house prices were rising. Difficult times make people more willing to change. Talent is more available now, too. Recruits are willing to work for less money than in the past, and well-trained “quants” and smart young MBAs, who formerly might have targeted jobs on Wall Street, are more open to different kinds of careers. On top of that, your company probably has slack capacity that you can devote to implementing the ideas described in this book.

With limited opportunity for top-line growth, operational improvements may be your surest source of profits.

The “New Normal”

On the basis of our reflections and conversations with executives and academics, we’re comfortable making three predictions for the new normal.

1. *The economy will grow more slowly* . Much of the growth of the last decade or so was fueled by leverage, which is unlikely to return to the same degree. Consumers are deleveraging, and this will probably continue to suppress their spending. Martin Walker argues that spending will likely fall back to its lower, historical trend. [1] “For several decades after World War II, private consumption measured as a share of gross domestic product had remained within a range of 61 to 63 percent,” he says. “But in 1983, [it] began a steady rise, peaking at 70 percent in 2007. Initially, this increase was fueled by the erosion of private savings, which declined from 9 percent of GDP in 1982 to nearly zero in 2005.” Often, home equity loans fueled these expenditures, with people tapping the fast-rising value of real estate.

   But consumers are no longer spending with such abandon. As of the summer of 2009, the personal savings rate in the United States had risen to almost 6 percent of GDP. Walker points out that even a small reduction in U.S. consumption would shrink the economy substantially. “In cash terms, U.S. consumption in 2007 amounted to $9.7 trillion—70 percent of the $13.8 trillion GDP. At a rate only two percentage points lower, Americans would have spent $300 billion less that year. At a normal rate of 63 percent, they would have spent $1 trillion less.”

   Several well-known executives have predicted that a changed economy is inevitable. Steve Ballmer of Microsoft has referred to the current climate as “a fundamental economic reset.” Jeffrey Immelt of General Electric expects permanent changes in the financial system and tighter credit, and also expects the government to play a more substantial role as a partner, regulator, and financier of business. Hence, he says, “There are going to be elements of the economy that will never be the same, ever. We’re going to come out of this in a different world.” [2]

   Not only will retailers face an economic headwind as they seek to increase sales, they will find it harder than in the past to obtain credit to open new stores. They thus must generate more of their sales growth from existing stores and use their stores, people, and warehouses more efficiently.

2. *Cheap will continue to be chic* . During the recession, customers became more frugal and postponed discretionary purchases. We’ve found two schools of thought among retailers on how long this behavior will persist. Some argue that consumer frugality is here to stay because the recovery will be slow and the severity of the downturn brought

about a permanent change in mind-set, just as the Great Depression did for an earlier generation. Others argue that Americans, naturally optimistic, tend to revert to their old ways and will soon forget the scare they've just had.

If consumers remain frugal, retailers may want to introduce products that appeal more to cost consciousness. Convenience store chain Cumberland Farms has done precisely this. When

Ari Haseotes took over as the president of the company's 550-store retail division in late 2008, he saw an opportunity to increase its market share for coffee. During the last decade, Cumberland had lost ground to coffee chains such as Starbucks and Dunkin' Donuts. Haseotes launched a new brand of coffee, called Farmhouse Blend, which acknowledged Cumberland's roots in the dairy farm business. Unlike at Starbucks and Dunkin' Donuts, where the smallest cup of coffee could cost $1.50, Cumberland offered any size for 99¢. It also promoted its new blend aggressively, in a series of "free coffee Fridays," soon after launch. Finally, Haseotes got employees excited about the program by offering to get a Mohawk haircut if they increased coffee sales by 50 percent in the first half of the year. In July 2009, he had to head to the barber and make good on his promise: coffee sales grew by over 50 percent, sometimes even hitting 60 percent or higher (all the way up to 80 percent in one week).

We believe that the recession contributed to Cumberland's success. Strapped consumers sought better value and were happy to try a free cup.

3. *Volatility will continue to rule* . Some economists predict that the United States will soon see a period of high inflation, while other equally eminent ones continue to worry about deflation. Many of the country's banks remain weak, and as we write this, about 10 percent of workers are unemployed. These sorts of macroeconomic woes translate to uncertainty for retailers. Consider, for example, recent evidence on sales. Many established retailers are seeing unprecedented drops in revenue. In July 2009, Abercrombie & Fitch reported that its sales had fallen by 28 percent from the prior year, and Neiman Marcus saw a 27 percent drop. JC Penney, Dillard's, American Eagle Outfitters, and Macy's also endured double-digit decreases. Retailers have become accustomed to dealing with uncertainty in their inventory mix. Now they're also likely to see considerable uncertainty in their total sales.

[1]From Martin Walker, "The New Normal, *Wilson Quarterly* 33, no. 3 (Summer 2009).

[2]Martin Walker, "The New Normal," *Wilson Quarterly* 33, no. 3 (Summer 2009): 63–66.

Rocket Science Retailing in the New Normal

How will rocket science retailing be different in the new normal than it was in the past? Equally important, what are the salient aspects of rocket science retailing that need to be reinforced? In the new normal, managers will have to learn to cope not only with *mix uncertainty* but also with *aggregate demand uncertainty.* In addition, managers will have to redouble their effort to improve product availability and operational execution.

Anticipate and React to Fluctuations in Aggregate Demand

With total revenue likely to fluctuate much more than in the past, managers must be ready to take anticipatory action. Consequently, they should improve their ability to forecast aggregate demand. Supply chains during the last few decades have focused on dealing with *mix* uncertainty. In fact, many of us—rightly for the time we were focused on—assumed that firms could forecast their *aggregate* demand well but not their *mix* , and we worked on improving approaches for mix forecasting. Unfortunately, these tools don't translate well to situations with aggregate demand uncertainty.

How well do managers forecast total revenue? You can get a sense of that from looking at investment *analysts'* forecasts. While it is true that managers have information that analysts lack, analysts' estimates and management's guidance on earnings (as opposed to sales) show that the two groups are closely aligned in their thinking. Analysts are often in frequent and close contact with management, even though they're not privy to inside information.

Examining analysts' sales forecasts in 2008 reveals that analysts— and probably managers too—were slow to update their demand forecasts as the economy deteriorated and the financial crisis intensified. Consider the consensus forecast for Abercrombie & Fitch, summarized in figure C-1. Notice that the company ended the year with sales of $3.54 billion.

In March and April 2008, when it was making operational plans (for example, sourcing raw material and planning production), analysts were expecting its annual sales to be roughly $4.2 billion. As late as August 2008, they were still expecting more than $4 billion, and even in October—that is, after Lehman Brothers declared bankruptcy—they were projecting close to $3.8 billion. In other words, they overestimated by roughly $250 million in October, nine months into the year for which they were forecasting. The evidence that we've seen suggests that this performance is typical: analysts and managers have trouble making forecasts in the kind of volatile economy that will probably be part of the new normal.

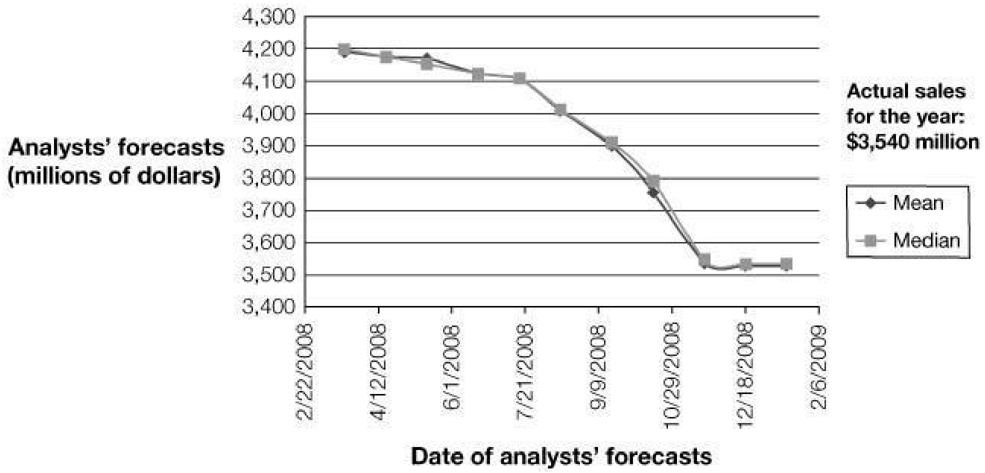

FIGURE C-1: Analysts' sales forecasts for fiscal year Jan. 31, 2008–Jan. 31, 2009

Pay Attention to Product Availability

Repeated studies in supermarkets and other retailers of fast-moving goods have shown that roughly 8 percent to 10 percent of the SKUs in a store are stocked out at any given time. Stockouts are expensive for retailers for two reasons. First, they lead to lost sales. A 2004 study that surveyed over seventy thousand consumers in twenty-nine countries found that when they did not find the exact item they wanted, nearly one-third went to another store to buy the product, while less than half bought a substitute. [3] Perhaps more significantly, stockouts harm customer goodwill. A study conducted by a multinational consumer-goods maker showed that consumers blame retailers for the stockout a whopping 83 percent of the time, irrespective of who caused it.

Pilot programs at many retailers have shown that stockouts can be reduced with better forecasting, inventory planning, and in-store execution—exactly the techniques described in this book.

Companies often understate sales lost due to stockouts. Our favorite example comes not from retailing but from Hugo Boss Bodywear, a division of Hugo Boss AG. [4] In a test, the bodywear division recently moved 45 of its SKUs from monthly to weekly ordering while leaving the ordering process for 269 SKUs, which served as a control, untouched. The in-stock rate on the 45 weekly SKUs went from 98.24 percent to 99.96 percent. Sales for the 45 SKUs increased by 32 percent, even while sales for the control SKUs *fell* by 10 percent. Why did sales rise by 32 percent rather than 1.72 percent, the difference between 98.24 percent and 99.96 percent? Though the division had historically achieved high in-stock rates *on average* , there were periods when in-stock rates on popular styles dropped to roughly 85 percent. Anticipating periods of low availability, retailers often carried an "insurance brand," which they could order more of during the periods when Boss's products were in short supply. By taking the in-stock rate close to 100 percent, Boss reassured retailers that certain SKUs would never be out of stock. Many retailers responded by dropping the insurance brand from their assortments, causing Boss's sales to skyrocket.

Improve Operational Execution

Steve Kaufman, former CEO of Arrow Electronics, a large distributor of electronic components, often says, "A less than perfect strategy with perfect execution will beat a perfect strategy with less than perfect execution every time." The adage is definitely true in retailing.

Execution can take many forms in retailing. In stores, for example, you must greet customers appropriately, keep inventory accurate, and minimize misplaced product. In any economy, these tasks will remain vital to competitiveness. Improving them requires attending to basics like employee training, appropriate staffing, and store layout. Everyone in retailing knows this, but basics are boring, and it's easy to lose sight of them.

The U.S. automotive industry offers a cautionary tale of the perils of not tending to the basics. The Big Three—General Motors, Ford, and Chrysler—declined and Toyota rose primarily because Toyota, with its push for continuous improvement, focused on operational excellence and produced more reliable, economical cars. Not surprisingly, Toyota's market capitalization during the last few years has exceeded by substantial amounts the market capitalizations of Ford, GM, and Chrysler *combined*— and that was true even before GM filed for bankruptcy and Chrysler was merged with Daimler.

Retailers should learn from the Big Three's mistakes. Toyota couldn't have beaten them without innovative human resource practices that engaged and empowered its line workers to identify ways to improve its production processes. Retailers, too, must recognize that to excel at execution, they must empower their people, including in their stores and distribution centers.

A few years ago, we visited a Toyota factory where we asked the plant manager why Toyota allowed other manufacturers (including competitors) to tour its plants. "Wouldn't they be able to copy the Toyota Production System?" we asked. "Others cannot replicate our performance unless they can replicate what goes on in our people's heads," he said. The more we learned about the Toyota Production System, the more we agreed. Other companies could (and did) easily copy physical attributes of the Toyota Production System, such as andon cords and kanbans. But they couldn't replicate Toyota's approach to people. The challenge with retail execution is similar. Not only do retailers, like manufacturers, have to focus on operational details, they also need to transform their frontline workers into a "community of scientists."

As we discussed earlier in this book, the hardest part of deploying analytics is implementation. It can take a long time and must be done in phases. It's a long journey for most companies. But as the Chinese proverb says, "A journey of a thousand miles begins with a single step." Are you ready to take a step?

[3]Daniel Corsten and Thomas Gruen, "Stock-outs Cause Walkouts," *Harvard Business Review* , May 2004.

[4]Cite Hugo Boss case or paper.