



# STYLE & STATISTICS

*The Art of Retail Analytics*

BRITTANY BULLARD

WILEY

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**Brittany Bullard**

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# About the Author

**Brittany Bullard** is a Solutions and Analytical Consultant in the Retail and Consumer Packaged Goods Practice at SAS Institute. Bullard focuses on retailers' strategic problems and identifies the challenges they face in an evolving industry. Her role allows her to apply her knowledge of advanced analytics to solve the most pressing issues and position SAS's customers for success.

Bullard brings to her team a decade of experience in the retail industry and a fresh millennial perspective on the customer and user experience. Versed in retail forecasting and omnichannel analytics, she serves as a member of the Strategic Retail Analytics team at SAS and on the Global Retail Community of Industry Leaders as the representative for the United States.

Originally a chemistry and math fiend, Bullard found the application of analytics in retail a perfect union of her strengths and passions. She now works to educate others on how they can drive innovation and develop professionally by leveraging the power of analytics.

Prior to joining SAS, Bullard acted as the manager of Forecasting, Allocation, and Replenishment at Beall's Inc. Her leadership of the implementation and management of retail analytics at Beall's connected Bullard to the SAS retail team. Bullard collaborates on the design of retail-focused solutions and the SAS Assortment Management portfolio, which was recognized as a leader in the Forrester Wave in 2014 and the Gartner Magic Quadrant in 2014, 2015, and 2016.

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# Introduction

Have you ever walked into a department store and wondered how the magic of sights, smells, and staging came together? The sweet smell of gardenia wafting from the fragrance department; the eclectic assortment of pumps, sandals, and flats in the shoe department; and the eye-catching visual merchandising of in-season colors and fashions that captures the essence of time? Such is the life of a retailer, who blends art and science to create an environment where you, the shopper, take center stage.

Many major retailers started out as individually owned stores. The owners ran the store themselves. They were in the store day in and day out so they knew their business. They knew their customers and their customers' preferences. Pricing of products was a pretty basic concept. The owners marketed by word of mouth or through local flyers and newspapers. Successful owners were able to add on more locations. As location growth increased, the complexity of buying, planning, and marketing increased. No longer were the owners in each location every day, nor did they know all of their customers on a first-name basis. With this expansion, retailers understood their customers less and were unable to tackle the workload on their own. Marketing became more difficult as well. The sheer volume of work became increasingly larger as businesses grew.

Therefore, owners began to hire a staff, who became an essential piece of the puzzle. Buyers or merchants were responsible for picking out products, determining how much to buy from different vendors, planning sales, planning inventory, and advertising their goods. The buyer had many functions in the beginning. Buyers tend to be individuals with a great eye for design. They are usually very artistic and creative individuals with good taste. Sometimes these individuals are described as being right-brained. The right side of the brain controls tasks that have to do with creativity and artistry. The right-brained, creative element for a merchant is a key benefit for selecting the perfect merchandise.

But eventually it became clear that businesses also needed a “left-brained” perspective to ensure profitability through math and logic. The left side of the brain controls tasks that have to do with logic. The left side is more geared toward math and science. Over time, the Picasso-Einstein model developed. Buyers are the Picassos, who are in charge of fashion artistry. Planners are the Einsteins, ensuring maximum profitability through math and science.

The original buyer’s role of picking products, determining how much to buy, planning sales, monitoring inventory, and managing other key metrics was divided up. Although the roles vary by retailer, in general, the planner manages the financial aspect of the business, ensuring that the sales targets are planned along with other key performance indicators and inventory. The merchant or buyer controls the selection and management of the assortment, within the financial budget that has been established by the planner. The buyer has the eye for fashion, trends, and taste. The planner ensures that the financial and strategic targets are achieved.

The greatest performance comes from a perfect marriage of the two roles. If planners were in charge of both roles, they would likely never take risks, have incredibly low inventories, and probably sacrifice presentation standards for fear of wasted inventory. Together, this partnership creates a beautiful, profitable business. The perfect marriage of art and science, it later evolved to the art and analytics of retail.

Marketing has evolved over time as well. Marketing developed from advertising. Today, advertising is a component of marketing. Advertising includes spreading the word about your brand or business. With most businesses, advertising begins as word of mouth. It can then branch out to newspaper ads, magazine ads, and even social media! Brands and retailers are now advertising on a plethora of platforms. The creation and nurturing of a retail brand is its lifeblood; think of Williams-Sonoma or Nordstrom; they both have a “brand” identity that invites and nurtures loyal customers. These brands reach their target audience through buying specific market ads to truly connect to their customers and sustain this brand loyalty.

But advertising is only one component of marketing. Marketing is the overall strategic planning, execution, and measuring of how a retailer or a brand interacts with its customers and how that brand is perceived. Public relations and community involvement aid in

brand perception. Marketing is no longer thought of as a commercial or a newspaper ad. Instead, it is thought of as a lifetime relationship between a brand and a customer.

There are multiple components of a retailer's business. These components have historically worked in silos. Merchandising and marketing, as described earlier, are two key components to driving merchandise assortments and communicating the most relevant information in the most effective way to the customer. The in-store teams, or store operations, are the components of the business that interact with the customers. The in-store teams are at the forefront of building relationships with customers once the merchandising, pricing, and marketing strategies have been executed. Last, cybersecurity is the component of the business that protects customers against cyberattacks and ensures that personal information, including credit card data, is not compromised.

The retail environment has had significant changes over the last couple of years with the rise of the digital landscape, an increase in e-commerce business, and the rise of the millennial customer. For retailers to be successful, they must break down the silos of these different components to their business to truly understand and shape the customer journey. In this book, we will walk through each component of the retailer's business. We will discuss what each component is responsible for, how retailers are able to intertwine the components, the challenges retailers face, and how retailers can leverage analytics to overcome challenges while maintaining the art of retail to drive profitability and efficiencies.



CHAPTER **1**

# **The Changing Face of Retail**



The Internet completely transformed the retail industry and the way we think about shopping. Retail changed from walking through a store to a click of a button while sitting on your couch in your yoga pants. The growth of mobile and technology has also revolutionized the industry.

The first online retail site was created in 1979. Michael Aldrich connected a television to a computer that processed transactions in real time using a telephone. He called it Videotex. This was even before the World Wide Web. Tim Berners-Lee created the first World Wide Web server in 1990. The first retail site was a book retailer, [www.books.com](http://www.books.com). In 1994, a secure port was developed for online transactions. This meant that customers were able to purchase items online through a relatively safe process, avoiding fraud and identity theft. It was by no means 100% secure, but it was better than previous attempts. Still, people were somewhat skeptical about making purchases online.

Amazon and eBay quickly followed in 1995. I remember surfing for designer items on eBay in my younger years. I had somewhat of an obsession with Nancy Kerrigan during my childhood. My first eBay/online purchase was a Nancy Kerrigan refrigerator magnet. When it arrived, I discovered that it was literally a cut-out of Nancy Kerrigan from a magazine article, laminated, with a magnet glued to the back.

That was the risk you faced during eBay's early years of bidding on items. Then eBay transformed into more structure and reliability. A "buy" option was also implemented, rather than waiting to be outbid or win. I'm not going to lie: I enjoyed the rush of the bidding process and the not knowing what you were going to receive in the mail. This might have been due to my age, but it created great memories.

Amazon was also one of the first e-retailers that only sold online. It has now grown to be the largest e-commerce retailer and recently opened a physical store location. Amazon started out selling books and has now grown to sell clothing, electronics, home goods, and even food. Amazon Prime offers free two-day shipping, which has attracted a vast audience. Amazon has also started same-day delivery in select major cities with a new program called AmazonFresh. Amazon's latest technological move is the dash button, a small button that can stick to any surface and connects to a customer's Amazon