

Chapter 4

Realizing the Potential of Retail Analytics

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ABSTRACT

Few industries are changing more rapidly than today's retail sector. A still-turbulent economy, new selling channels, advanced digital technologies, and increasingly demanding consumers all challenge retailers to find new ways of remaining relevant and competitive. The purchasing decision journey for consumers involves multiple steps, many of which are now being captured, digitized, and transformed into metrics and data. As this data becomes an implied derivative of essential retail and consumer technologies, the focus is shifting from how to acquire the data to how to extract insights from it— insights that can be turned into differentiation and competitive advantage for the retailer and a better shopper experience for the consumer.

INTRODUCTION

Retailing today is changing at a much faster pace than any other industry. Retailing industry is trying to be competitive by changing rapidly. A still-turbulent economy, with new and innovative selling channels, advanced digital technologies, and increasingly demanding consumers all challenge retailers to find new ways of remaining relevant and competitive. Looking at the purchasing decision journey of consumers which involves multiple steps, almost of these are now being captured, digitized, and transformed into metrics and data. This data which are captured have become an implied derivative of essential retail and consumer technologies, and are the source of retail analytics which is how to acquire the data to how to extract insights from it. Retailers look to turn these insights into differentiation and competitive advantage for the them and at the same time provide better shopper experience for the end consumer.

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But the main challenge of big data is just that—it's not only big but also unstructured most of the times. Massive amounts of structured and unstructured information are piling up in retailer and supplier data warehouses, stores (both physical and online) and at the manufacturing location as well. Unstructured data holds the key insight as customer metrics derived from video and other sensors, social media and mobile devices have the power to provide unprecedented insight into the purchase decision process.

Retailing industry are among the first industries that recognized the benefits of using predictive analytics and started to employ it mostly to stay ahead of competition and putting understanding of the customer as a first-priority goal. Today's competitive business environment understanding of your customer requirement and offering the right products at right time is the key of any successful business. Due to high growth of internet, online shopping is becoming most interesting and popular activities for the consumers. Online shopping is providing a variety of products for consumers and is increasing the sales challenges for e-commerce players.

Offline or the brick and mortar and the pure play online retailers are evaluating its performance in terms of point of sale (POS) transactions and working to address questions like how much the customer bought, the size of the purchase, impact of marketing, how to leverage online visitors' data to improve the customer experience and the driving factors of online shoppers' behaviors. Predictive analytics is used to identify an untapped sales opportunity for new items shoppers' online behavior.

Using statistical analytical techniques like A/B/multivariate testing, visitor engagement, behavioral targeting can lead toward high propensity of a prospect's willingness to buy a product. In this chapter, authors provide insights on how the online data can support customized targeting, resulting in incremental increases in e-commerce revenues by advanced predictive modeling on visitors' behavior.

Almost all of ecommerce retailers want to understand their customer behavior and need to maximize customer satisfaction in order to maximize their sales. As retailers look to build an optimum marketing strategy to deliver the targeted advertising, promotions and product offers, their expectations from these strategies is to motivate the prospects to buy more. Still it's a challenge for most of the retailers to digest all of the data, technology, and analytics that are available to them.

Retail Business Analytics in Context

There are millions of products on offer by the retailers around the world but not everything interests the consumer. How to retailers know what their customers want to buy? Well, analytics is the answer and by using business intelligence and business analytic methods retailers would be able to find it. Key is to use right methodology.

The main purpose for companies to use business analytics is to gain a competitive advantage. By using different tools, models and skills this can be done in a number of ways. Below, we briefly present some commonly known business issues within retail today and what potential benefits and insights could be gained from business analytics to help address those issues.

One of the major challenge in using business analytics is to know how to get started. Retailers do not often know what data to collect, how to collect, how to analyze and how to derive the insights that will help drive growth and improve profitability. So these retailers collect enormous amounts of data every hour to make sense from it later. Retailers are able to make basic analysis but when it comes to making spectacular insights that really make a difference, retailers more often fail to do so as they may not which data to take into consideration.

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