

Rocket Science Retailing
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Retailing is a huge industry. In the U.S., retail business represents forty percent of the economy and is the largest employer. Retail supply chain management is still more art than science, but this is changing rapidly as retailers begin to apply analytic models to the huge volume of data they are collecting on consumer purchases and preferences. This industry-wide movement resembles the transformation of Wall Street that occurred in the 1970's when physicists and other 'rocket scientists' applied their analytic skills to investment decisions.

To better understand this phenomenon, I have been working over the last decade with a number of colleagues and about 50 leading retailers to assess their progress towards rocket science retailing and to accelerate that progress through selected research projects with the retailers.

This talk will briefly review past progress and then focus on one current project in which I am working with several colleagues and five retailers to discover ways to improve store level execution. We're analyzing store-month data on sales, customer satisfaction and store execution to determine which of various store execution variables (ranging from in stock rate to fraction of time store associates make eye contact with customers and greet them) most influence customer satisfaction and sales. I'll describe results for one retailer in the study where we are able to identify factors that explain 79% of the variation in sales and 94% of the variation in customer satisfaction. Our results suggest that using the results to optimize store execution variables would increase sales by about 5-10%, an improvement most retailers would regard as quite significant.