Zach Becker

Retail Pulse

The objective of this project for Retail Pulse is to analyze retail sales data to try and uncover patterns and other insights for stores in Melbourne and Sydney. I want to look at sales patterns over time to get a better understanding of seasonal trends and key drivers of sales. I segment the customer base in the project based on their spending behavior and frequency of purchases, and take a look at some of the over and underperforming products.

The internal dataset called retailPulse.csv includes data such as Order Date, Order Total, Order Quantity, and Product Category, customer data such as Customer Name, City, State, and Customer Type, as well as product data such as Product Name, Cost Price and Retail Price. I also use external data regarding Australian holidays to create a new "Is Holiday Period" feature that I can use to look at holiday vs non-holiday sales trends.

Some consumer segments that I uncovered included high-spending, low-frequency customers which look to be big corporate purchases made only a few times a year, low-spending, and infrequent buyers which was the largest segment, representing more casual buyers and had a solid mix of consumer, home office, and small business purchases. There were also a couple segments made up of much more frequent buyers that had moderate order quantities and total sales, which I feel can be big targets for individualized marketing campaigns, since they are already predisposed to frequent purchases.

In terms of cities, Sydney certainly had more sales than Melbourne, and they also had a higher proportion of their sales come from holiday periods. I would recommend stores in Melbourne try and capitalize more on holiday marketing to try and bring that proportion closer to that of Sydney.