Springboard Capstone Project Proposal

Vikash Patel

Forecasting Walmart Sales During Inclement Weather

For my capstone project, I will be working to predict if inclement weather (like heavy rain and snow) affects the sales of potentially weather-sensitive products at Walmart, and if so, measure how extreme its effects are. The client in this case is Walmart, and they will be interested in the conclusions of this forecasting study because it provides actionable insight. Around the time of severe weather, Walmart locations around the world will be able to adequately prepare their inventories of weather-sensitive products, and avoid experiencing out of stock headaches as well as overstocking issues. To tackle this problem, I will be using Walmart sales data of weather-sensitive products in conjunction with weather data from NOAA to analyze buying trends respective of weather. This data is readily available via the Kaggle competition that Walmart has created for this specific problem. I will also be considering other potential factors in buying these products, like holidays. This will allow me to observe whether inclement weather has enough of an effect on sales, and if Walmart should adapt their inventory management according to weather predictions for the future. Project deliverables will include the code behind the data analysis and model training. Also, there will be a written report supplemented with a slide-deck outlining the steps taken in the project, conflicts that were encountered, and a conclusion to Walmart’s problem.