## Return Rate Presentation

## Introduction:

This analysis aims to identify where we are seeing the highest return rates and where we can decrease our investment in those areas to become more profitable. The main question we want to answer is, how do we decrease average return rates for the business? With this analysis, I have highlighted product categories in geographical regions of the US with recommendations on how we can work to decrease return rates.

## Data Description:

The dataset that I am using is the orders from the superstore and joined this with the returns dataset. I created a custom parameter for return value for null equaling 0 and returned equaling 1. Then I made this number an average and applied this across different dimensions like subcategory, states, and months.

## Methodology:

I first wanted to identify the main subcategories that are causing the most returns. In my first slide, I noticed that the top three were machines, fasteners, and chairs. Then I wanted to highlight the states and months that we are seeing the highest rate of returns.

I noticed that August and the Western states had the highest returns. This led me to layering these dimensions with product category. In the next two slides, you'll notice that the Western regions by far had the most returns, with California, Utah, and Oregon leading the pack. This gave me the idea of identifying which subcategories had the highest return rates for these states and recommending that we begin a customer survey for those who buy these products. Also, recommending that we assess the quality of these products that are being sold in these regions.

Lastly, I recommend we look at the profit margins and consider pulling back on inventory for these products if they are leading to decreases in revenue. In conclusion, I highlighted that the Western Region and the subcategories fasteners, appliances, and machines were the areas of most concern when looking at high return rates and possibly decrease in profits.