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Summary: New York City on Two Wheels

Description of our Dataset

- CitiBike is a bike sharing program in NYC
- Obtained datasets of February, July and October from the official CitiBike website
- Weather data obtained from the National Climatic Data Center (NCDC) Climate Data Online (CDO)

Number of Customers vs. Precipitation and Temperature

Research Questions

- How does weather affect the volume of CitiBike users?
- What factors influence users to have an overtime ride?
- What role does gender and being a subscriber or a customer play in bike usage?
- Does the user behavior vary with season?
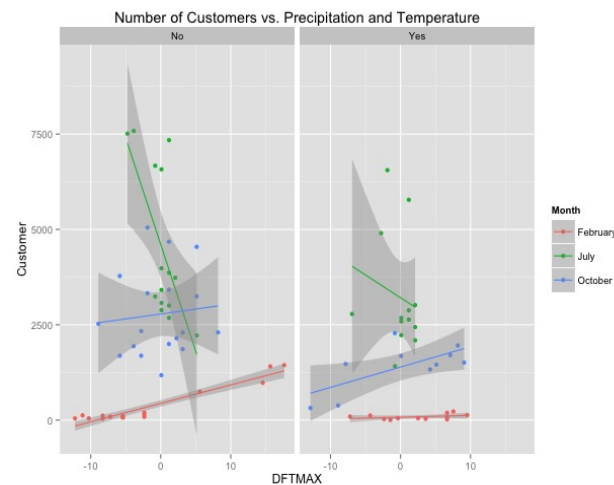
Findings

- CitiBike subscribers are predominantly male
- Volume of CitiBike users is highest in July
- Growth in number of subscribers outpaces growth in customers over time
- Users prefer no precipitation and low average wind speed
- Customers prefer lower-than-average temperatures in July
- Males and female subscribers prefer higher-than-average temperature in July
- Customers are more likely to have overtime rides than subscribers
- Subscribers' tendency to go overtime could be predicted by factors such as age, gender and weather
- Customers' tendency to go overtime are hard to capture
- A given ride is more likely to be have been taken by a female subscriber if it was on a weekend and if there was no precipitation or wind