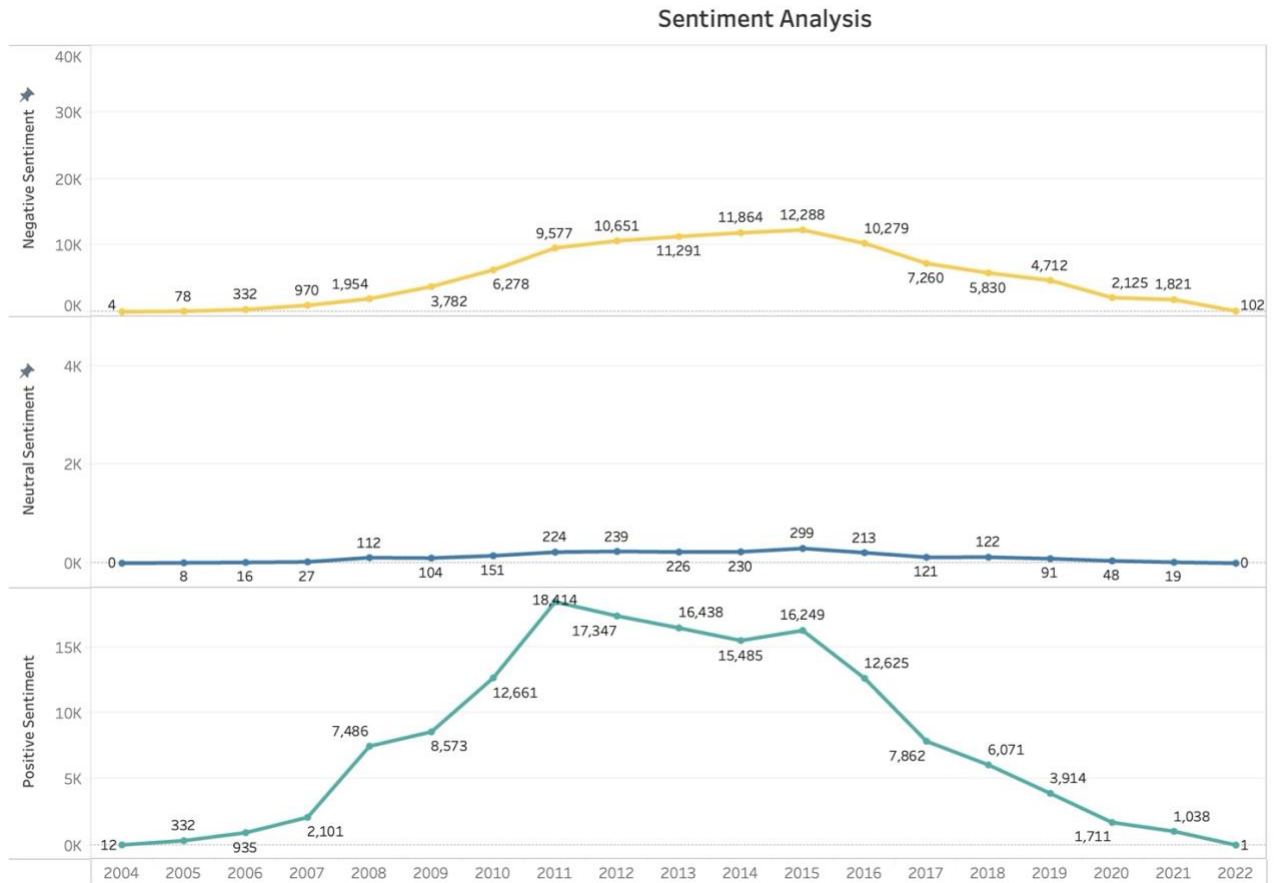


**DATA 228 – Big Data Technologies**  
**Customer Segmentation and Analysis on Yelp Dataset**

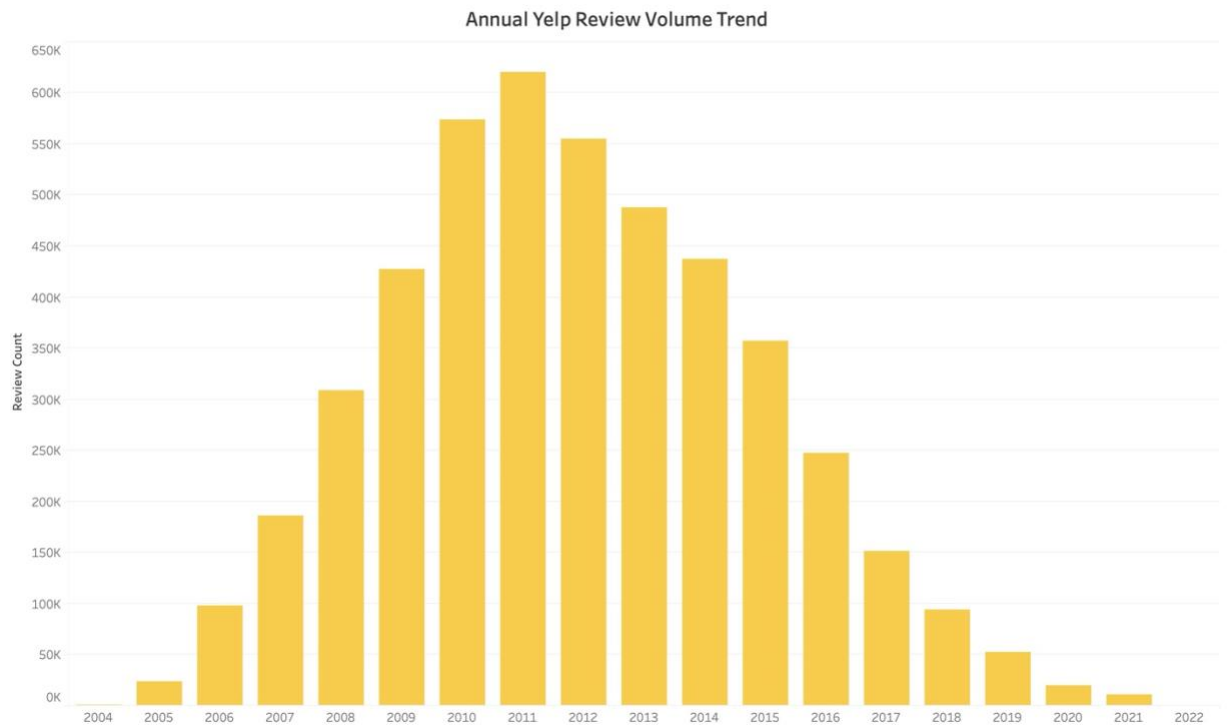
**Data Visualizations on Tableau**

## 1) Sentiment Analysis:



This visualization represents the volume of sentiments (negative, neutral, and positive) across different years, highlighting the changes in sentiment distribution over time. We can see that the number of positive insights during the years 2007 to 2020 are significantly higher than that of neutral and negative compliments.

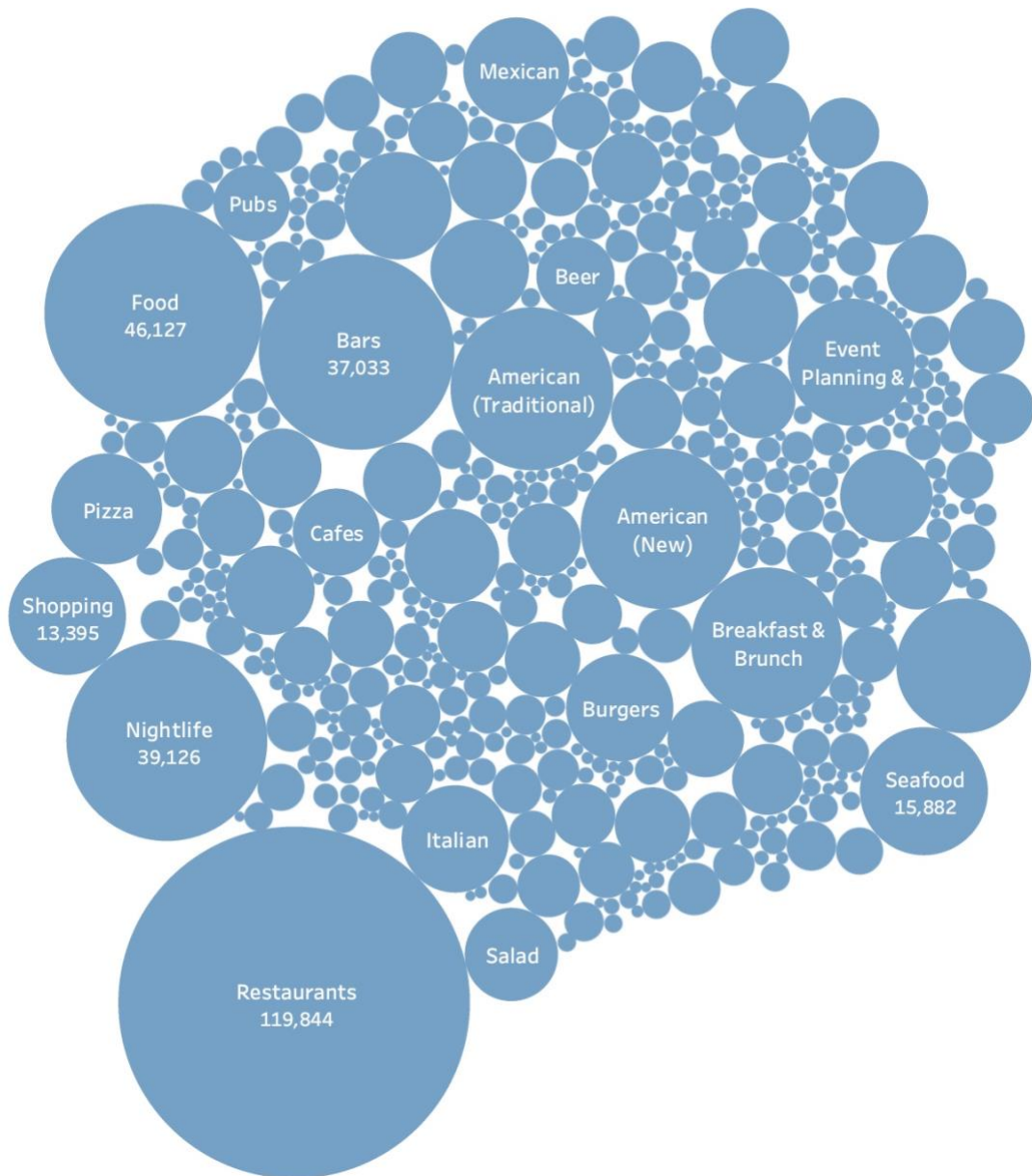
## 2) Annual Yelp Review Volume Trend



This shows the trend of Yelp review volumes year-over-year, with the height of the bars indicating the number of reviews, which can signal the platform's growth or decline in user activity.

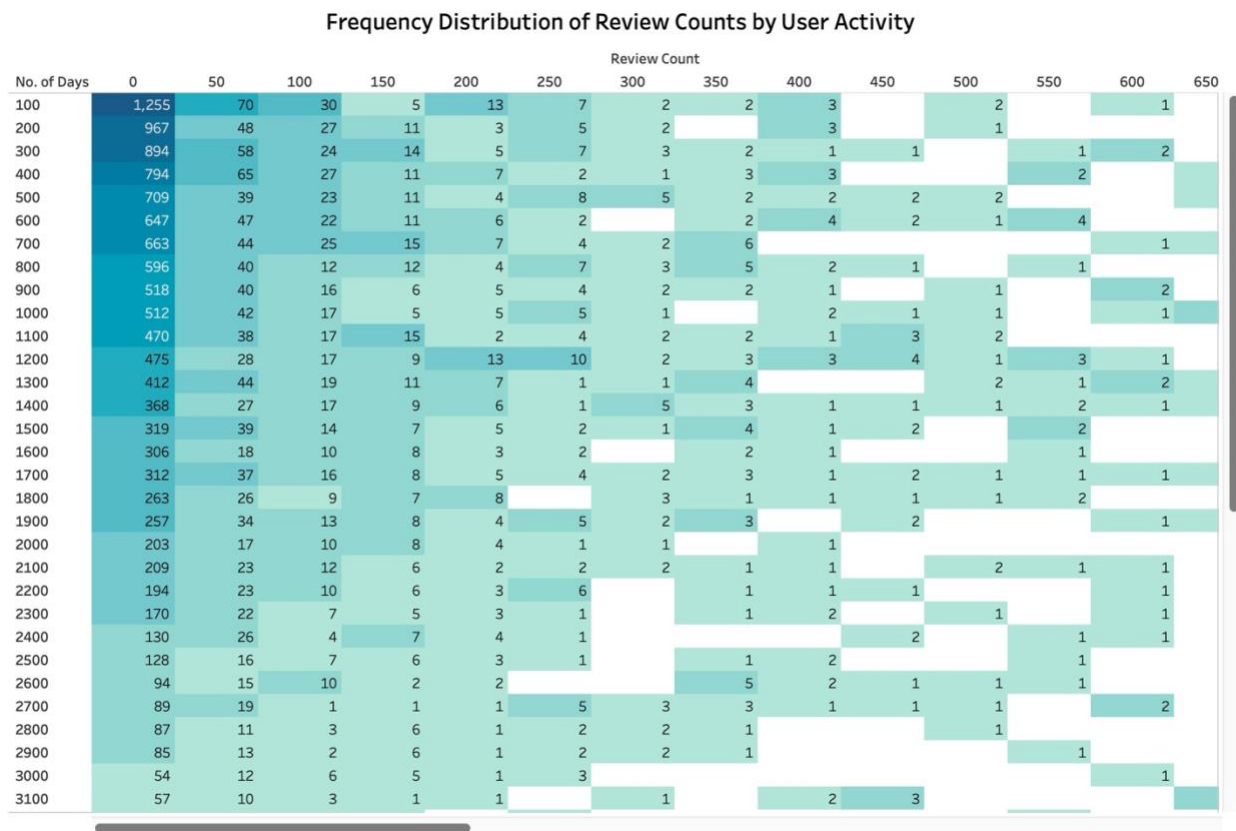
### 3) World Cloud

#### World Cloud Of Categories



A visual representation of the popularity of categories, with the size of each term indicating the frequency or importance, useful for identifying the most prominent categories in a glance.

## 4) Frequency Distribution of review Counts by User Activity



This is a heatmap that visualizes the concentration of reviews over different time spans, with darker shades typically representing higher frequencies.

## 5) Distribution of Sentiment analysis



This visual represents the percentage of sentiments (negative, neutral, and positive) with respect to each other. This gives us an overview of the comparative trend of each sentiment.