

# Create Data Visualizations in Tableau with Snapchat Ads Data

By: Sriram M - 20BCE1755

Dheeraj Sai.T - 20BCD7247

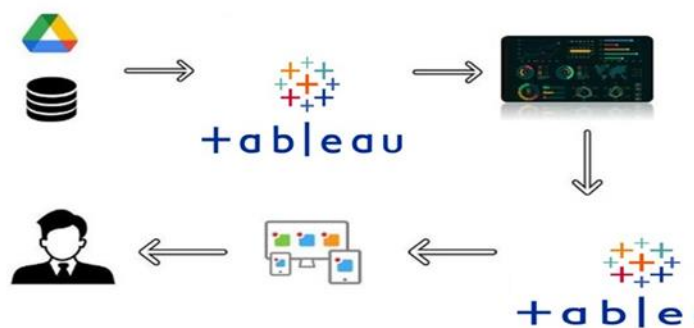
A. Sai Raghuram - 20BCE7130

Ganta Tarun - 20BCD7251

Mobile advertising is one of the main engines of growth for brands today and an integral part of any digital marketing strategy, especially when reaching millennials and Gen Z. People nowadays spend most of their time online in apps instead of web browsers. Additionally, the COVID-19 pandemic increased people's screen time.

One platform that has proven itself particularly popular among younger generations is Snapchat. A key player in the digital space, Snapchat is the 12th most popular social media platform and the sixth most popular message app worldwide. And with a total of 319 million daily active users, Snapchat is quickly more and more lucrative for mobile advertisers and publishers looking to acquire new app users, increase their revenue, and become a part of their key audiences' conversations.

## Technical Architecture:



## **Project Flow**

To accomplish this, we have to complete all the activities listed below,

### **Define Problem / Problem Understanding**

- Specify the requirement for ad analysis
- Ad data insight
- What ads are best for effectiveness

### **Data Collection & Extraction from Database**

- Collect the dataset,
- Connect the database to tableau

### **Data Preparation**

- Prepare the Data for Visualization

### **Data Visualizations**

- No of Unique Visualizations

### **Dashboard**

- Responsive and Design of Dashboard

### **Story**

- No of Scenes of Story

### **Report**

- Creating a report

### **Performance Testing**

- Amount of Data Rendered to DB ‘
- Utilization of Data Filters
- No of Calculation Fields
- No of Visualizations/ Graphs

## **Project Demonstration & Documentation**

<https://drive.google.com/file/d/10mnkQytiJ0EdxSuhYz536S1onygEp-fa/view?usp=sharing>

## **Business Requirements**

The business requirements for this project would likely include

### **Data collection:**

The first requirement is to collect data from Kaggle that is relevant to the Company name, Job Title, Salary, Salaries reported, Location, Employment Status, Job roles, and rating

### **Data cleaning and preparation:**

The collected data must be cleaned and processed to ensure it is suitable for analysis. This may involve removing irrelevant information, correcting inconsistencies and missing values, and transforming the data into a format that is compatible with the analysis tools.

### **Data analysis:**

The data must be analyzed to uncover meaningful insights. This could involve using techniques such as descriptive statistics, regression analysis and data visualization to gain a deeper understanding of the data.

### **Report creation:**

The insights and findings from the data analysis must be presented in a comprehensive report that includes visualizations and data tables. The report must be well organized and easy to understand, with clear and concise explanations of the results.

## **Data Collection & Extraction From Database**

Data collection is the process of gathering and measuring information on variables of interest in an established, systematic fashion that enables one to answer stated research questions, test hypotheses, evaluate outcomes, and generate insights from the data.

## **Collect The Dataset**

<https://github.com/sriram-m-1234/Smartinternz-project/tree/main/dataset>

## Data Preparation

Data preparation for Tableau involves the process of organizing, cleaning, and transforming raw data into a format that can be effectively visualized and analyzed within the Tableau software. This includes tasks such as data cleaning, data integration, data formatting, and data aggregation. The goal is to ensure that the data is accurate, consistent, and structured in a way that enables meaningful insights and visualizations in Tableau.

## Prepare The Data For Visualization

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete. This process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency.

## Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex datasets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

## No Of Unique Visualizations (Filters Applied)

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the data include bar charts, line charts, heat maps, scatter plots, pie charts, maps, etc. These visualizations can be used to compare performance, track changes over time, show distribution, and show relationships between variables.

Explanation video link :

<https://drive.google.com/file/d/10mnkQytiJ0EdxSuhYz536S1onygEp-fa/view?usp=sharing>

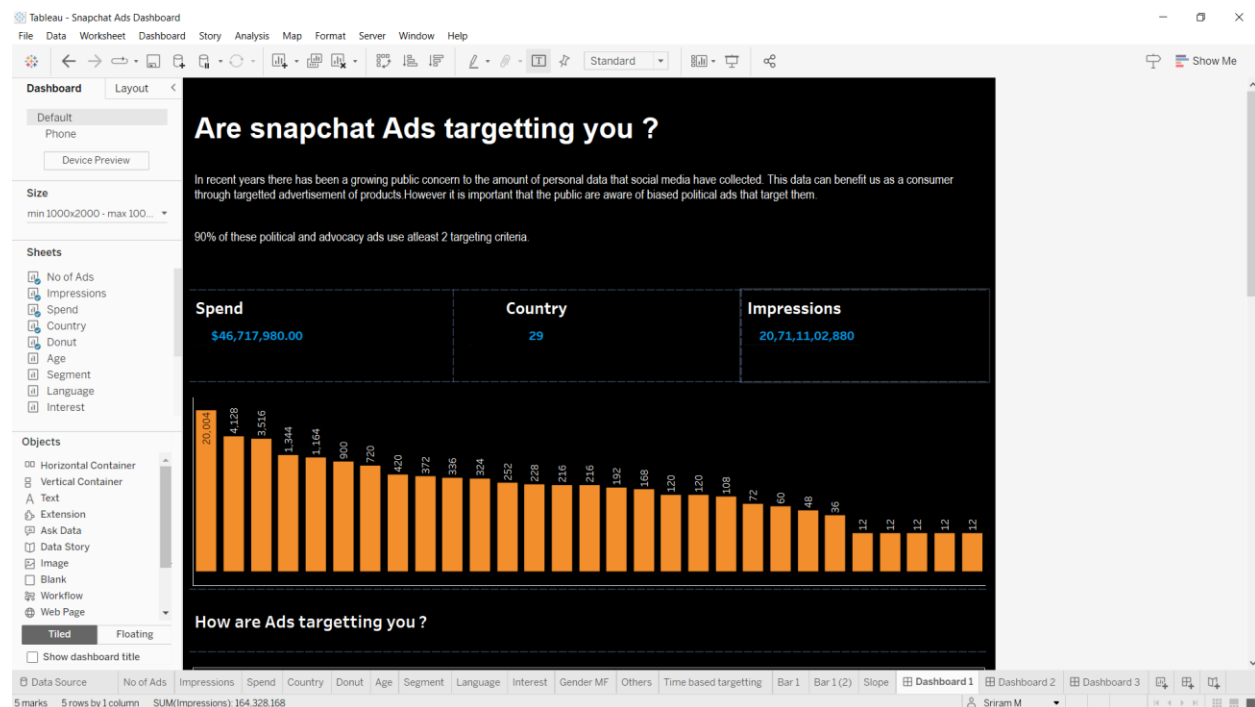
## Dashboard

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data and are typically designed for a specific purpose or use case.

Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

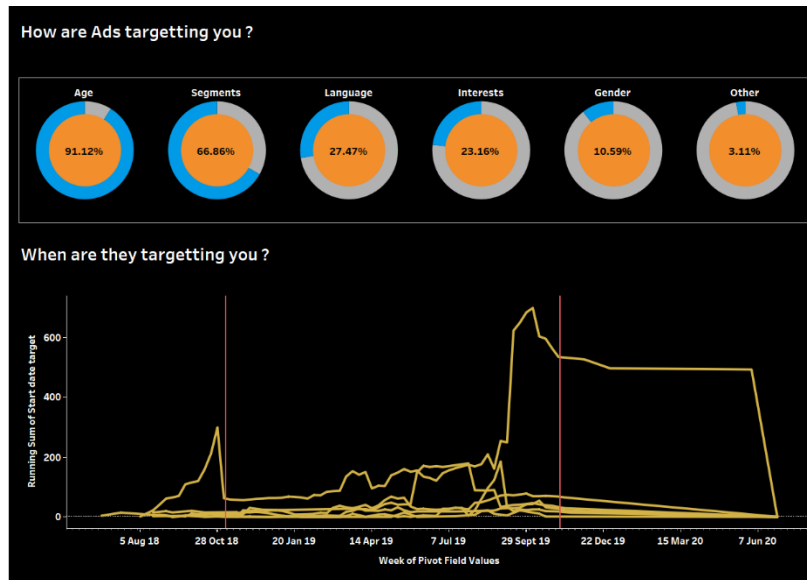
## Responsiveness And Design Of Dashboard

The responsiveness and design of a dashboard for analyzing the factors important for A comprehensive analysis advertisement data



## Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.



## No Of Scenes Of Story

The number of scenes in a storyboard for a data visualization analysis of the factors affecting the insights of ad data effectiveness will depend on the complexity of the analysis and the specific insights that are trying to be conveyed. A storyboard is a visual representation of the data analysis process, and it breaks down the analysis into a series of steps or scenes.



## Performance Testing

Performance testing for Tableau focuses on evaluating the software's speed, responsiveness, and scalability under various conditions and workloads. It involves measuring and analyzing key performance indicators such as query response time, data loading speed, dashboard rendering time, and concurrent user handling capacity. The testing process helps identify any performance bottlenecks, optimize system configurations, and ensure that Tableau can handle the expected workload efficiently, providing users with a smooth and responsive experience while working with large datasets and complex visualizations.

## Web Integration

Publishing helps us track and monitor key performance metrics, to communicate results and progress. Help a publisher stay informed, make better decisions, and communicate their performance to others.

### **Activity : Integrating with Tableau Public**

<https://drive.google.com/file/d/1xJAjuMrLA9Wrj09-jKgiGrtWA1Winuc-/view?usp=sharing>

<https://drive.google.com/file/d/1kE9hhDbyTSqjSCjq4uob3Dqt8lzJDCis/view?usp=sharing>