Voyage Vista: Illuminating Insights from Uber Expeditionary Analysis

Project Based Experiential Learning Program

BY TEAM NM2023TMID33983

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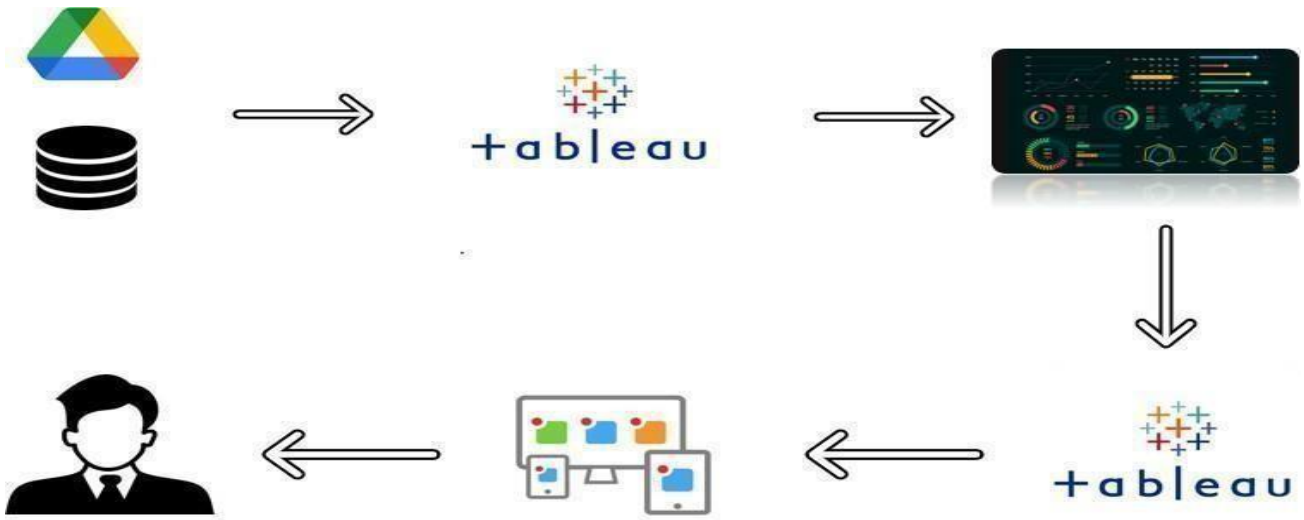
Voyage Vista : Illuminating Insights from Uber Expeditionary Analysis

Project Description:

Uber is a multinational transportation network company that operates a ride-hailing platform. It was founded in 2009 by Garrett Camp and Travis Kalanick and is based in San Francisco, California. Uber provides a convenient way for individuals to request rides from drivers who use their own personal vehicles.
Uber Driver Analysis refers to the Analyzing the number of trips taken by Uber drivers can provide insights into their overall activity and the demand for rides in specific areas. Daily, Weekly, or Monthly Analysis: Uber's data can be analyzed on a daily, weekly, monthly basis to understand the trends and patterns of trip volumes. This analysis can help identify peak hours or days of high demand and optimize driver availability during those times. Trips can be analyzed based on geographic regions or specific cities to identify areas with higher demand. This analysis can help Uber drivers decide where to focus their driving efforts for maximum efficiency and profitability. The Major of our project is to use data Analyzing techniques to find unknown patterns in the Uber Drives dataset. The research is carried out on Uber drives data collected from the year 2016.

Technical Architecture



Milestone 1: Define Problem / Problem Understanding

Activity 1: Specify the business problem

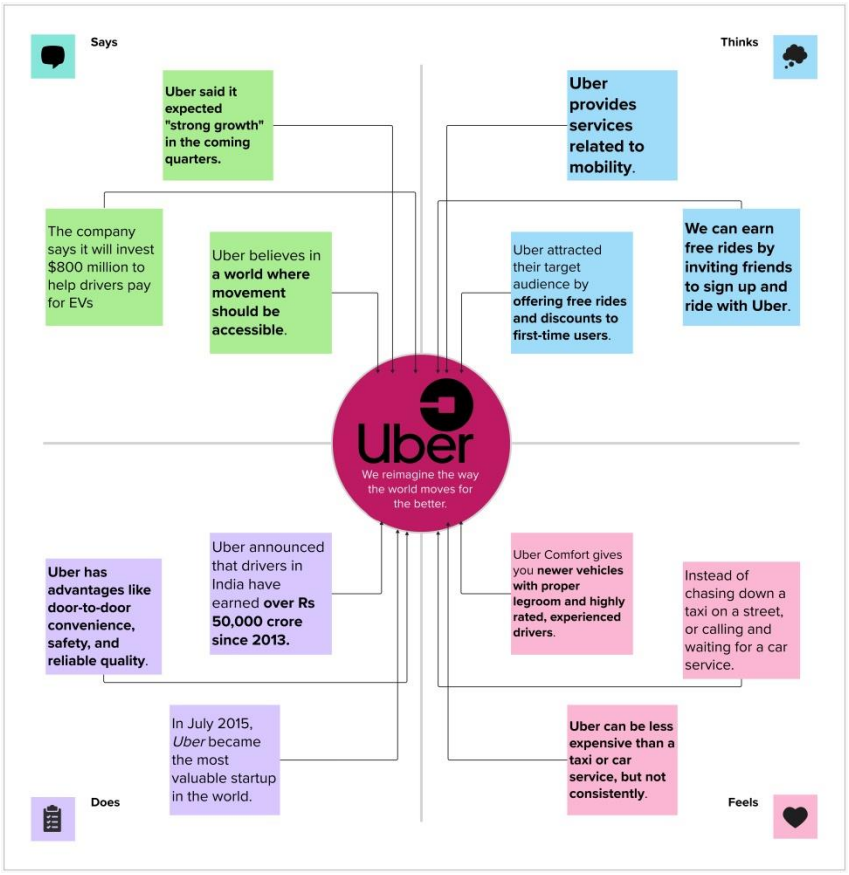
We defined the problems by searching something related to the topic from online and also the points provided in the pdf preferred by SmartInternz.

With the informations provided by SmartInternz, we created a sympathy map to explain says, thinks, does, and feels about the company Uber.

With the co-operation of the whole team, we completed the sympathy map through analyzing the problems.

After completing the sympathy map, we started working on brainstorming by describing the problems.

We first started working on finding the problems and we described some problems on the first box.



Activity 2: Business requirement

After determining the problems, our team started working on the procedures to overcome the issues through the ideas given by each and every team members.

Each and every members in the team gave two to three ideas, according to

the ideas which help to solve the problems/issues in the company Uber.

And we describing the best ideas in the last graph , in which we separated them in three types according to the quality of the ideas.

Milestone 2: Data Collection

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, and evaluate outcomes and generate insights from the data.

Activity 1: Collect the dataset

We used to collect the data from the given link provided to our team. And we used the datas that had been collected from the kaggle is used to do the project.

Activity 1.1: Understand the data

Data contains all the meta information regarding the columns described in the CSVfiles . You have provided a csv file.

Column Description for Uber Drives- 2016.csv:

- START_DATE: 2 JAN 2016 – 1 JAN 2017.
- END_DATE: 2 JAN 2016 – 1 JAN 2017.
- START: Cary, New York, Durham, Downtown, Midtown, Midtown East, Houston, Gulfton, Whitebridge, Houston, Morrisville and 798 Others.
- STOP: Cary, New York, Durham, Downtown, Midtown, Midtown East, Houston, Gulfton, Whitebridge, Houston, Morrisville and 798 Others.
- Miles Covered: 0.5-1220.92

- Purpose: Meeting, Temporary Site, Customer Visit, Meal/Entertain, Errand/Supplies, Airport, Between Offices, charity, commute, moving.

With those informations, we used to do the project.

Activity 3: Connect Dataset with Tableau

After downloading the dataset, we started working on that. We used those datas to work on Tableau.

Steps to be followed:

1) Open the tableau desktop.
2) Select the text file.
3) And a new workspace page is opened.
4) Click on the connect to data.
5) Connect the dataset that you have downloaded.
6) And now your dataset will be connected to the tableau.

Milestone 3: Data Preparation

Activity 1: 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 our analysis.

Milestone 4: Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore information. The goal of data visualization is to make complex data sets 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.

Activity 1: No of Unique Visualizations

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 performance and efficiency of a project 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 relationships between variables.

Activity 1.1: Miles Covered per Category and Purpose

Activity 1.2: Miles Covered in Category Analysis

Activity 1.3: Month wise Uber Miles Analysis

Activity 1.4: Week wise Uber Miles Analysis

Activity 1.5: Quarter wise Uber Miles Analysis

Activity 1.6: Month wise Uber Trips Analysis

Activity 1.7: Quarter wise Uber Trips Analysis

Activity 1.8: Hour wise Uber Trips Analysis

I had explained those things in my video link.

Milestone 5: 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 usecase. 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

Activity :1- Responsive and Design of Dashboard

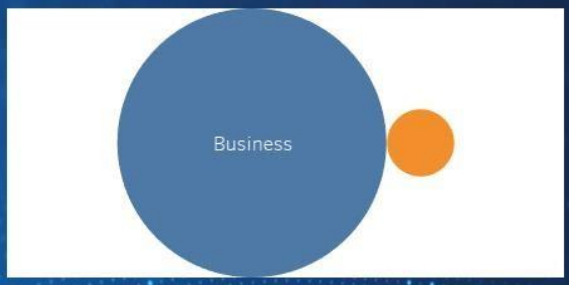
The responsiveness and design of a dashboard for Data-Driven insights on YouTube channels Analysis is crucial to ensure that the information is easily understandable and actionable. Key considerations for designing a responsive and effective dashboard include user-centered design, clear and concise information, interactivity, data-driven approach, accessibility, customization, and security. The goal is to create a dashboard that is user-friendly, interactive, and data-driven, providing actionable insights.

UBER DRIVES ANALYSIS

NEXT

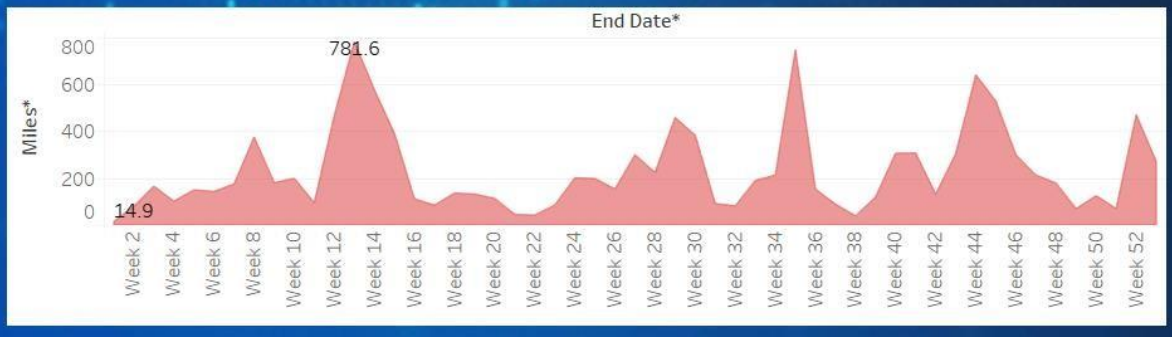
Quarter Wise Trips

Category of Miles



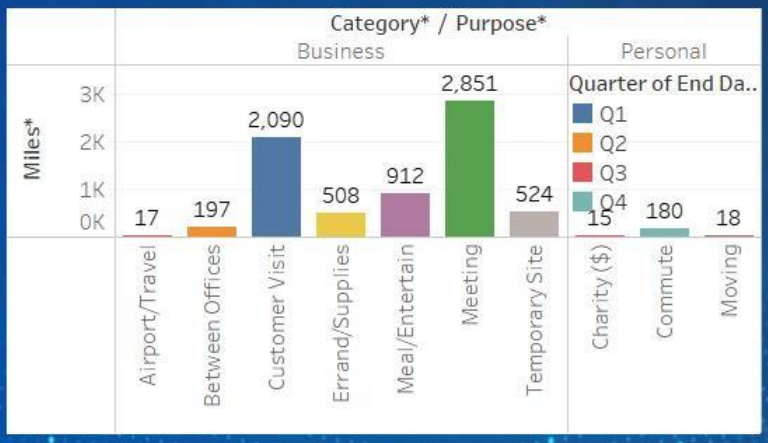
Number of Trips per Month

January 2016	Februar y 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	Septem ber 20..	October 2016	Novemb er 2016	Decemb er 2016
61	115	113	54	49	108	112	133	36	106	122	146

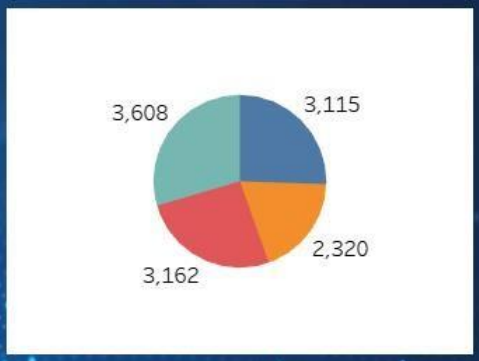


UBER DRIVES ANALYSIS

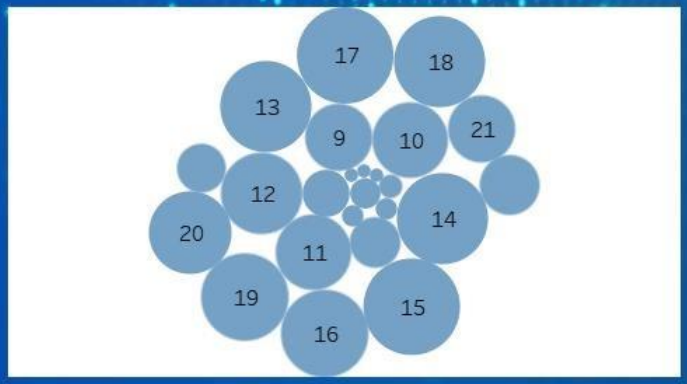
PREVIOUS



Quarter Wise Miles



Hour wise Analysis



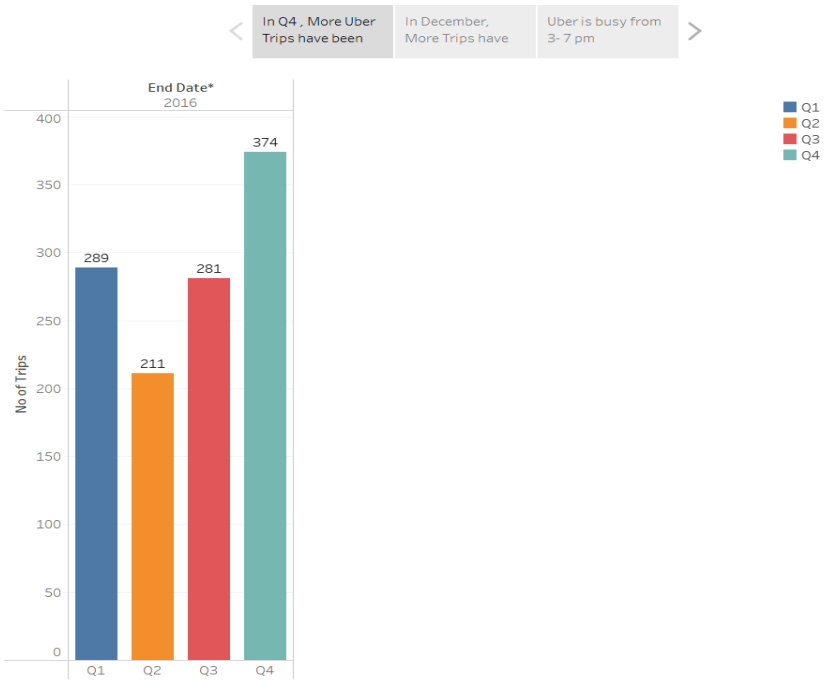
Month Wise Miles

. Milestone 6: 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.

Activity:1- No of Scenes of Story

The number of scenes in a storyboard for Data-Driven insights on YouTube channels Analysis 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.



In Q4 , More Uber Trips have been | In December, More Trips have | Uber is busy from 3- 7 pm

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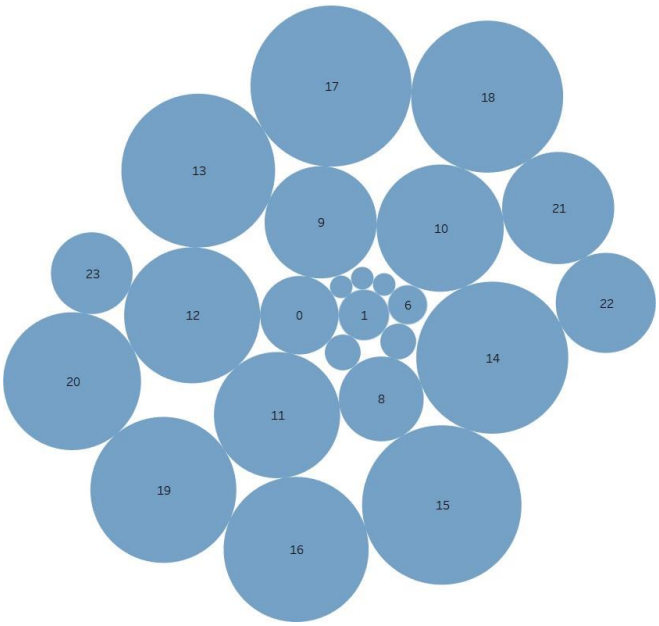
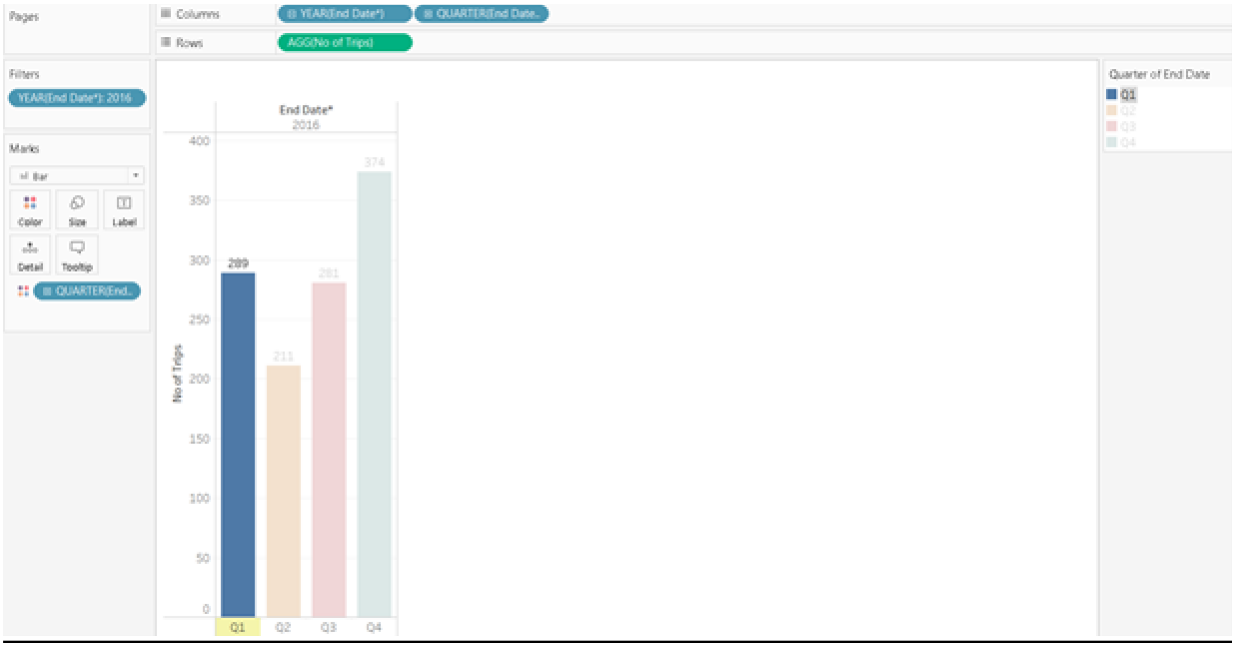
No of Trips
36 146

In Q4 , More Uber Trips have been | In December, More Trips have | Uber is busy from 3- 7 pm



Milestone 7: Performance Testing

Activity 1: Utilization of Filters



Activity 2: No of Visualizations/ Graphs

1. Bar graph showing Purpose of Uber with Miles covered.
2. Bubble chart showing distribution of Miles with Category.
3. Bar graph showing Quarter with Number of Trips

4. Highlight Table shows Month with Number of Trips.
5. Bar graph showing Month with Miles.
6. Area Chart showing Week with Miles.
7. Pie chart showing Quarter with Miles.
8. Bubble Chart showing Hour with Number of Trips.
9. Tree Map showing Distance between the Start and Stop Locations.

Milestone 8: Publishing

Publishing helps us to 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.

Publishing dashboard and reports to tableau public

Once the upload is complete, a browser window will automatically open, displaying your published workbook on Tableau Public. Review the workbook to ensure that everything appears as expected.

So in Similar way we can also publish Story to tableau public.

Milestone 9: Project Demonstration & Documentation

Activity 1: Record explanation Video for project end to end solution

We recorded the video where there we explained the whole process.

FEEDBACK:

Kindly apologize us for submitting project report like this. We didn't have enough time to complete our project. It is hard for us to complete this project in two days.

THANK YOU.