



GOVERNMENT ARTS AND SCIENCE COLLEGE- PAPEREDIPATTI

DEPARTMENT OF PHYSICS

NAAN MUTDALAVAN ONLINE COURSE

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PROJECT NAME

Illuminating Insights from Uber Expeditionary Analysis

FACULTY NAME

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TEAM DETAILS

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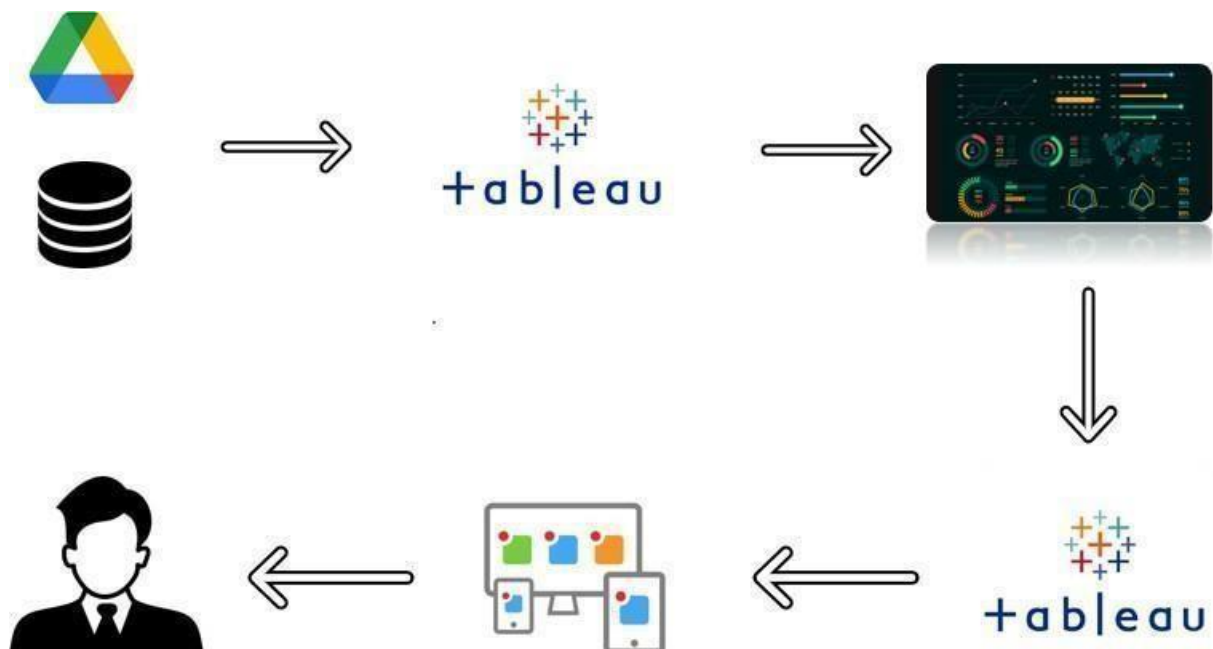
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1. INTRODUCTION

1.1 Overview

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.



1. 2. Purpose

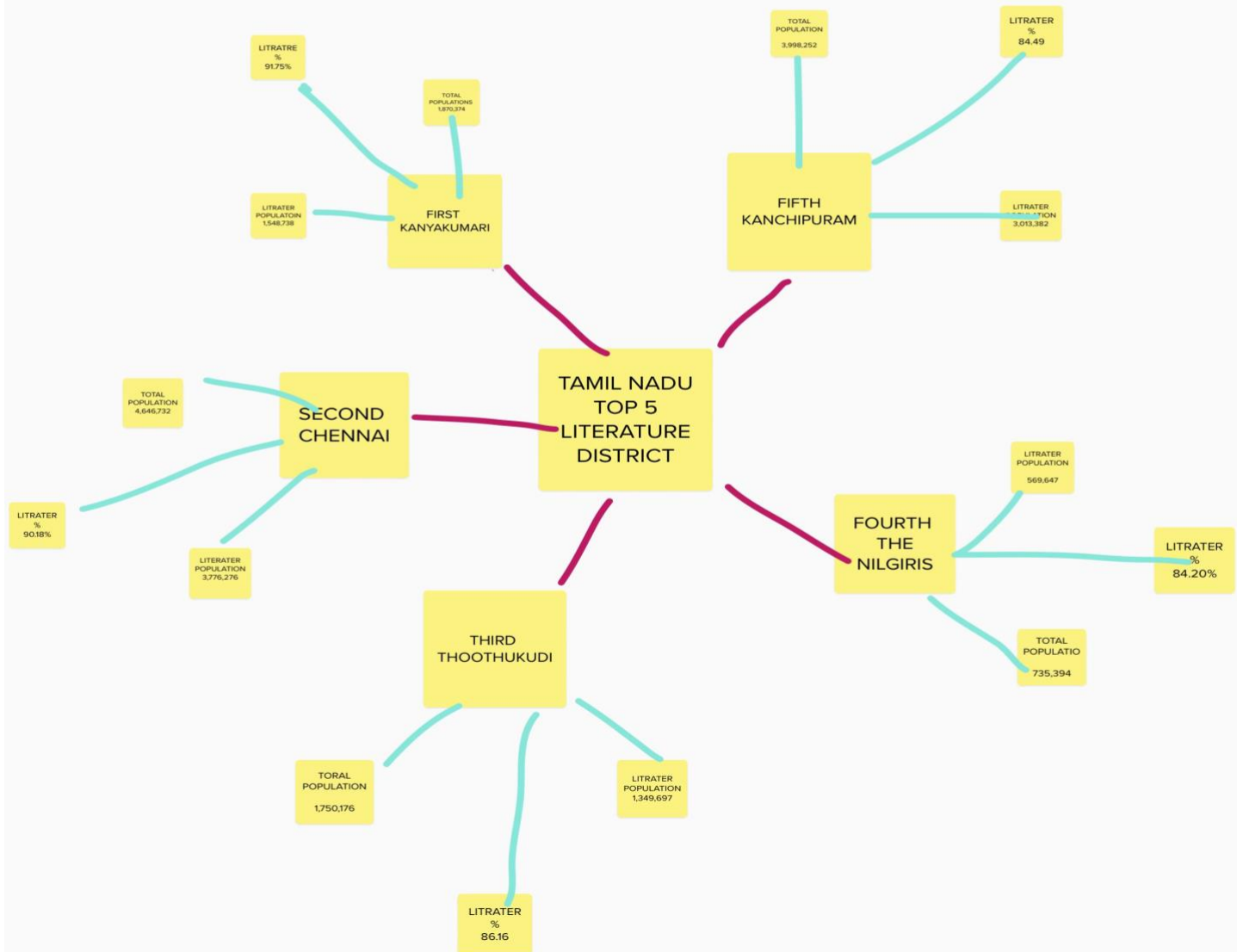
This analysis can help identify peak hours or days of high demand and optimize driver availability during those times. Trips can be analyzed based on geographic regions or specific cities to identify areas with higher demand.

2.PROBLEM DEFINITION &DESIGN THINKING

2.1Empathy Map

Visualizing user attitudes and behaviors in an empathy map helps teams align on a deep understanding of end users. The mapping process also reveals any holes in existing user data.

TAMIL NADU TOP 5 LITERATE DISTRICT



2.2 Ideation & Brainstorming Map

Legend has it that in the summer of 1994, as the production of Toy Story was wrapping up, four Pixar creatives went to lunch to brainstorm ideas for new project.

It's inspiring that such massively successful blockbusters started on napkins, but that's the first step for any good idea, right? Getting ideas out of your head and putting it into the world in some tangible way is how you turn them into reality.

Most people don't sketch the next great animated movie characters on napkins, but we all need a way to tease out our ideas, think through concepts, and put them into a usable format. That's essential for creativity, in our personal lives and in business. Lists, outlines, and notes can help, but they don't always lend themselves to radical innovation, learning, or problem-solving.

VOYAGE VISTA



3. RESULT

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.

UBER DRIVES ANALYSIS

Category of Miles



Quarter Wise Trips



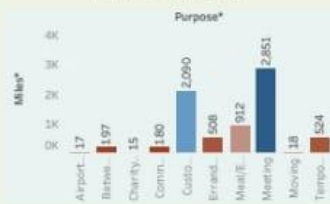
Month Wise Uber Trips Analysis

End Date*											
Jan..	Feb..	Ma..	April	May	June	July	Au..	Se..	Oct..	No..	De..
61	115	113	54	49	108	112	133	36	106	122	146

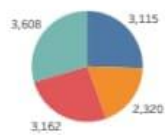
Quarter wise Uber Miles Analysis



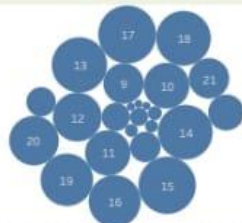
Miles Covered per Category and Purpose Analysis



Quarter Wise Miles



Hour Wise Uber Trips Analysis



Week wise Uber Miles Analysis



4. ADVANTAGE & DISADVANTAGES

Advantage :

Uber through E-hail has hired drivers easily and fast. Proprietary software in the app locates drivers circling nearby cheapest carpooling luxury wheels. The price is fixed.

1. Convenient and Cashless

Instead of chasing a taxi on a street, or calling and waiting, app users can book a ride from any location and it arrives in minutes.

Passenger's credit or debit card is linked to the taxi app account, no cash changes hands.

After the completion of the ride, A receipt is sent via email, and some links to options for rating and tipping the driver.

2. Professional Service

Drivers for Uber may use their own cars and bike. Drivers get incentives to keep their taxis clean and well-maintained.

The cheapest options for taxis are late-model compact cars and bikes.

The riders need to insert their destinations into the app, and the drivers use the taxi app navigational features to reach the rider which is provided by the taxi app development company.

The driver talks in a polite and well-spoken manner. Drivers don't get your destination details before picking you up.

A driver with a low rating will force a driver out of Uber or its competitors.

3.Competitive Pricing

Uber is less expensive than other taxi services, but not always. Longer trips are always cheaper by Uber but short rides can be expensive.

The price model for Uber and other taxi apps can have higher booking prices due to busy times of the day.

It is impossible to come up with a fixed price for an uber ride. Its costing plans vary from one city to another and from one country to another.

But uber always show you the estimated fare before starting the ride.

4.Safer and Flexible

Safety is crucial for both passengers and drivers. This is what Uber is good at it. It is one of the major advantages of Uber.

The riders are registered their identities and their payment channels. Cashless transactions also make it safer, a driver and rider don't need to carry cash.

DISADVANTAGE:

1.Surge Pricing

“Surge pricing” or “rush time pricing” is not fixed in uber. It's a free market principle of raising prices according to supply and demand.

This means how many taxis are available (supply) and how many customers want to ride(demand).

This automated system sometimes shows differences in pricing between any two same points.

At peak times, the price could be double or more. This means too costly during rush hour.

Although this benefits uber by increasing the supply of drivers. Drivers can be motivated to earn at this time.

2.Low Fares WorryDrivers

Some Uber drivers say they struggle to earn minimum wage. Drivers have to pay the cost of fuel, maintenance, and repairs from their own 9pocket.

With competition from other taxi apps, the earnings of drivers can be driven downward.

This indicates that they need to work for longer hours to earn a certain income.

3.Price Competition

Uber and other taxi-hailing companies are engaged in an intensive fight to provide the most affordable service.

They are competing with traditional taxi services for both customers and drivers. This has led to low earnings for taxi drivers.

5. APPLICATIONS

- ❖ 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.**

6. CONCLUSION

At the end of this Uber data analysis R project, we studied how to create data visualizations. We used package ggplot2 that helped us to plot various types of visualizations that pertained to several time-frames of the year.

With this, we conclude how time and place affected customer trips. Finally, we made visualization a Geo plot of New York that provided us with the details of how various users made trips from different bases.

7.FUTURE SCOPE

We can use this data for training a model using ML and building a smart AI based predictive system.

Model can automatically send the insights to the authorities or drivers related to areas having most trips and passenger count in certain areas.

This big data can be used to study passenger's behavior.

8.APPENDIX

https://drive.google.com/file/d/1ueEaxP0Usd_LlI5JmGdhz3x_xWXSFWV8/view