



GOVERNMENT ARTS AND SCIENCE COLLEGE, KANGEYAM

PG AND RESEARCH DEPARTMENT OF MATHEMATICS

Course Name : Data Analytics with Tableau

Academic Year : 2023-2024

A project report entitled as

“Voyage Vista : Illuminating Insights Form Uber Expeditionary Analysis”

Work done by

Univ.Reg.No	Naan Mudhalvan ID	Name	Class
2122A0608	DD4BE9DBBC55682A38E40AC75D970127	MATHUMITHATHANGAM.A	B.Sc., Mathematics
2122A0606	666D231194055509C7D48440F422438D	KAVITHA . R	B.Sc., Mathematics
2122A0607	ECE645F108CC3EBA75E48DEC3F9FBD33	MALARVIZHI .S	B.Sc., Mathematics
2122A0609	D66492B8372FEBDA931418B7E174E1A4	MURUGESH . R	B.Sc., Mathematics

Team ID: NM2023TMID28001

Under the guidance of

Dr. P.M.SUDHA

Guest Lecturer

PG and Research Department of Mathematics

Government Arts and Science College, Kangeyam-638108.

VOYAGE VISTA : ILLUMINATING INSIGHTS FORM

UBER EXPEDITIONARY ANALYSIS

1.INTRODUCTION

1.1Overview

Uber and other taxi app companies have changed the transportation industry. The taxi business revolutionized every business model that had been functioning in the same way. Ride-sharing app services have interrupted the taxi and limo industry. These apps offer door-to-door service, safety, and reliable quality.

One of Uber's key value propositions is offering scheduling flexibility to their driver-partners. According to a report by the Beneson Strategy Group, 73% of drivers prefer having a job that lets them choose their schedule. Drivers can use this flexibility to maximize their expected revenue during their available times. To this end, Uber provides heatmaps of customer demand that allow drivers to target high-demand regions that provide higher trip probability and therefore higher expected revenues.

However, there is no readily available way to determine whether trips starting at a particular location are worth the time it would take to service the trip. For example, a trip that takes longer due to traffic but has high demand may result in fewer total trips and be less valuable. On the other hand trips with less demand but are consistently much faster may be more valuable. Therefore it is in the driver's best interest to balance the demand of a location and the amount of time trips from that location will take. ty and therefore higher expected revenues.

.”

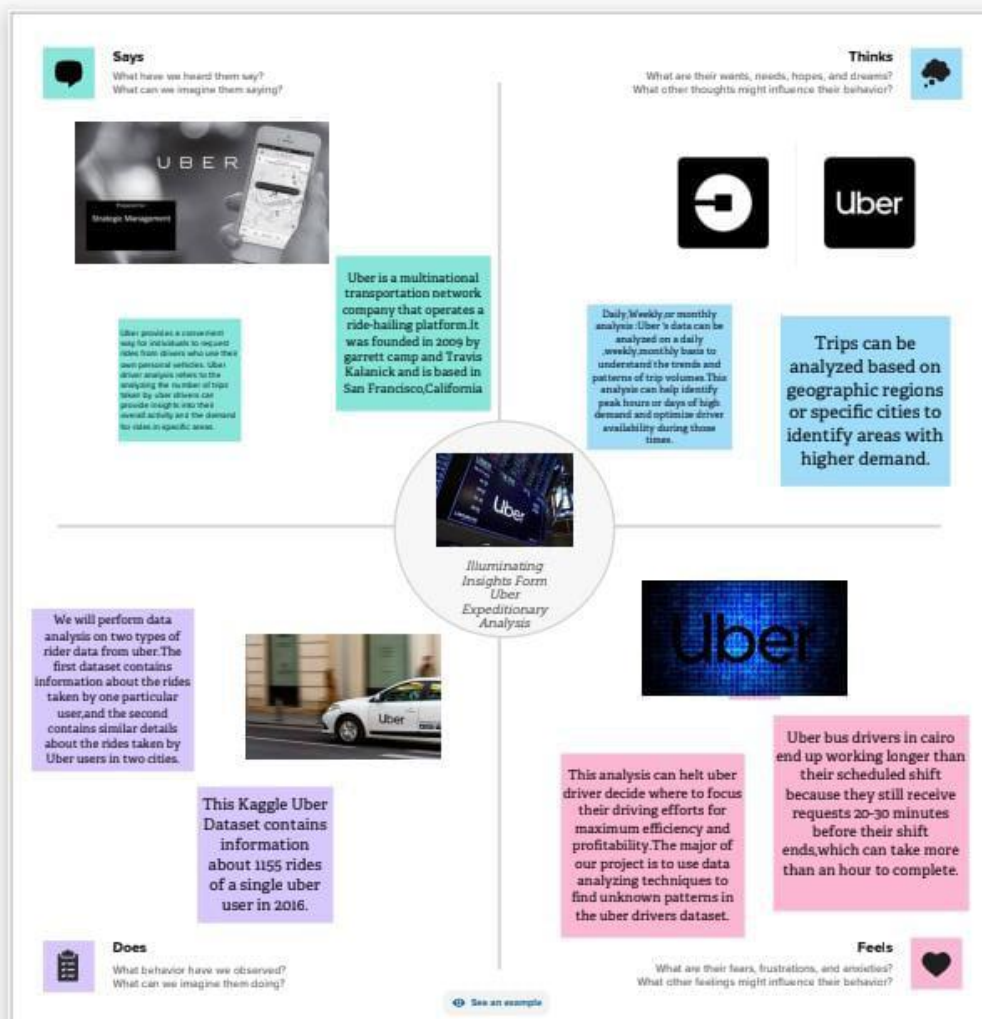


1.2 PURPOSE:

Uber is a transportation company with an app that allows passengers to hail a ride and drivers to charge fares and get paid. More specifically, Uber is a ridesharing company that hires independent contractors as drivers. Uber is a transportation company with an app that allows passengers to hail a ride and drivers to charge fares and get paid. More specifically, Uber is a ridesharing company that hires independent contractors as drivers. It's one of many services today that contribute to the, supplying a means of connecting existing resources instead of providing the physical resources themselves. Using a ridesharing app like Uber has several advantages over more traditional transportation methods. As mentioned, Uber's dynamic pricing model attracts drivers to certain areas at critical times, making it more likely that a car will be available during times of high passenger need.

2.PROBLEM DEFINITION AND DESIGN THINKING

2.1 Empathy Map



2.2 Ideation & Brainstorming Mapping

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 1. 10 minutes or longer
- 2. 4 users or collaborators
- 3. 3-8 people recommended

Before you collaborate

1. Make sure all participants have a fairly easy way to share ideas. There's what you need to do to get going.

2. All activities

- 1. Brainstorming: Getting everyone's thoughts in the room and onto a table. There's no limit to the number of ideas you can generate.
- 2. Set the goal: Define the problem you're trying to solve and what you want to achieve.
- 3. Learn from the facilitator: Use the facilitator's expertise to help you stay on track and generate ideas.

4. Set the goal: Define the problem you're trying to solve and what you want to achieve.

Define your problem statement

What problem are you trying to solve? Frame your problem in a clear, specific statement. This will be the focus of your brainstorming.

5. All activities

Problem

How can we help users find the best route to their destination?

Key rules of brainstorming

- 1. No criticism
- 2. No limits
- 3. No time limit
- 4. No idea is too small
- 5. No idea is too big
- 6. No idea is too late
- 7. No idea is too early
- 8. No idea is too small
- 9. No idea is too big
- 10. No idea is too late
- 11. No idea is too early
- 12. No idea is too small
- 13. No idea is too big
- 14. No idea is too late
- 15. No idea is too early

Brainstorm

Write down any ideas that come to mind. Don't worry if your ideas seem silly or obvious.

6. All activities

Person 1

User app can geo-locate the user at the landing runways of the airport and send them push notifications to book their ride.

Person 2

The average time from flight landing to the user waiting for a ride can be reduced by 10 minutes if the user can be alerted to the user's location.

Person 3

The solution previously discussed for the user waiting time with an increase in the number of vehicles can be improved by the user's location.

User can be given an option to pre-book their return after a successful drop-off.

User can better pre-plan the pickup based on their return flight data.

The solution will decrease the expected waiting time for a user.

Group ideas

Take turns sharing your ideas while clustering similar or related ideas on page. Once all ideas have been grouped, give each cluster a sentence like below. If a cluster is bigger than one sticky note, try and use a few and break it up into smaller sub-groups.

7. All activities

Location inconvenience canceling rate of user canceling the ride because of MY DRIVER AND I COULDN'T LOCATE EACH OTHER w/ SUCCESSFUL RIDES

This data can be also be benchmarked with the data of airports which have a comparable number of pickup and drops to the airport

Parking spot success ratio w/ canceled rides

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

8. All activities

Importance

Feasibility

User can be given an option to pre-book their return after a successful drop-off.

User app can geo-locate the user on the landing runways of the airport and send them push notifications to book their ride.

User can better pre-plan the pickup based on their return flight data.

User can better pre-plan the pickup based on their return flight data.

The solution will decrease the expected waiting time for a user.

An average time from flight landing to the user waiting for a ride can be reduced by 10 minutes if the user can be alerted to the user's location.

After you collaborate

You can export the board as an image or pdf to share with members of your company who might be helpful.

9. All activities

Quick add-ons

- 1. What's the goal? What is the user trying to achieve? What is the user trying to achieve?
- 2. What's the goal? What is the user trying to achieve? What is the user trying to achieve?

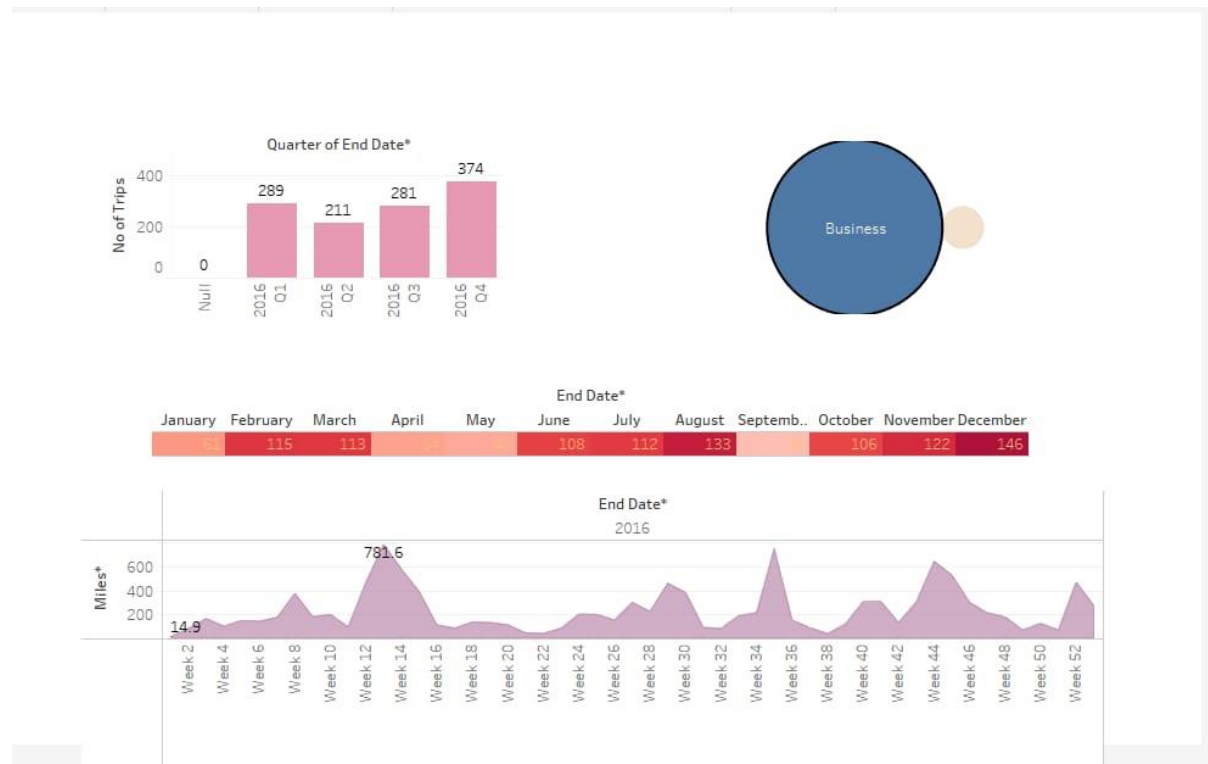
Keep moving forward

- 1. What's the goal? What is the user trying to achieve? What is the user trying to achieve?
- 2. What's the goal? What is the user trying to achieve? What is the user trying to achieve?

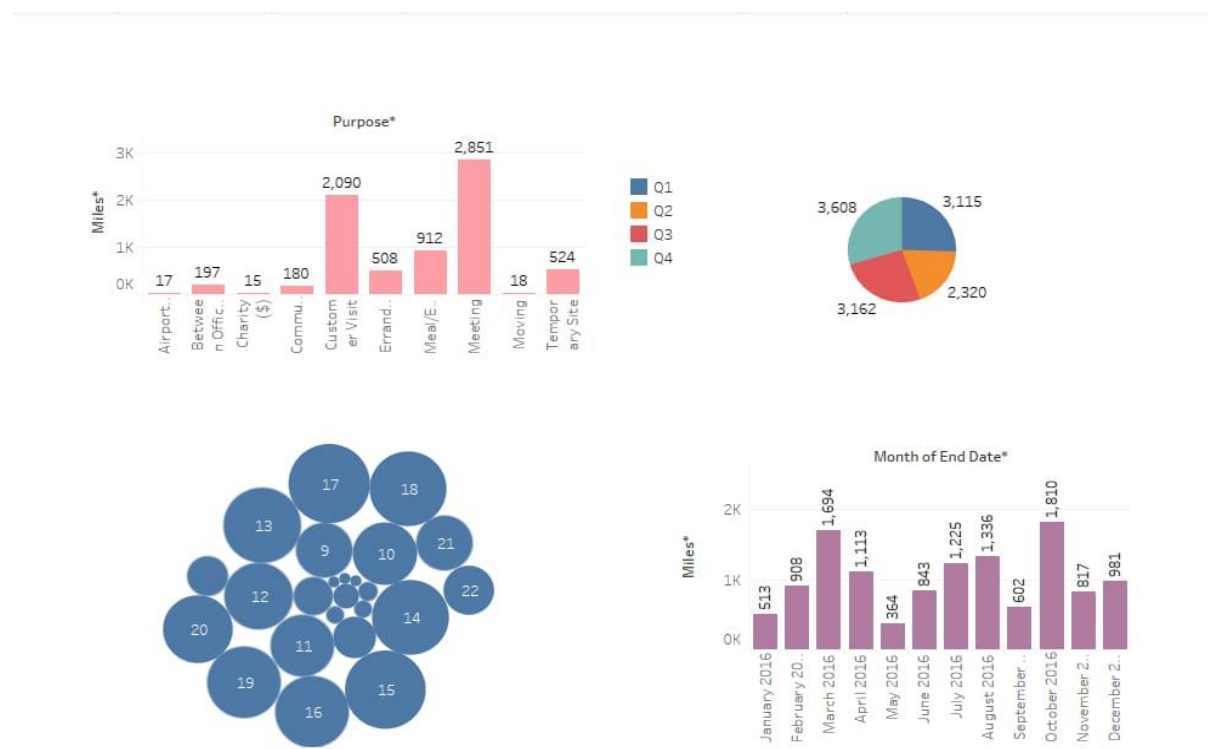
What's the goal? What is the user trying to achieve? What is the user trying to achieve?

3.RESULT

Dashboard 1



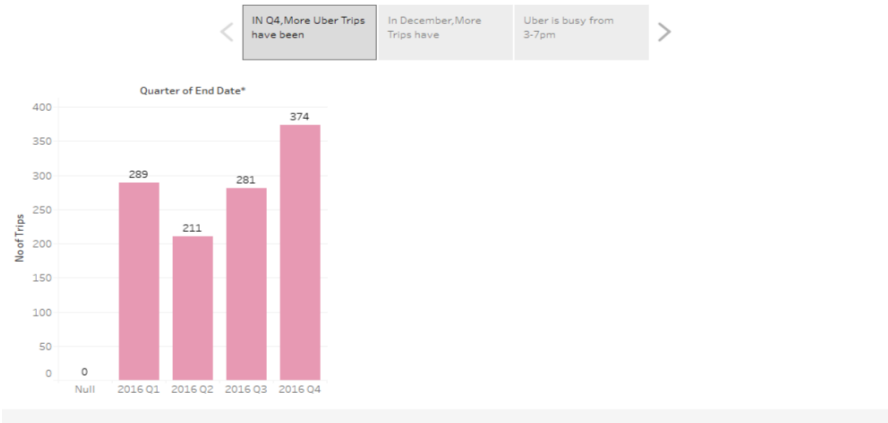
Dashboard 2



STORY

STORY 1

Story 1

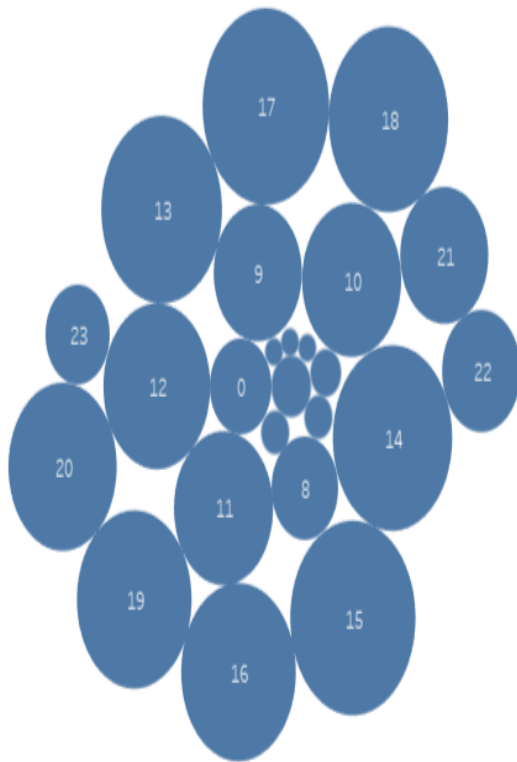
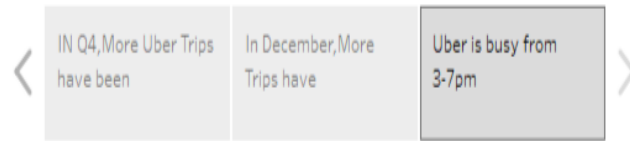


STORY 1



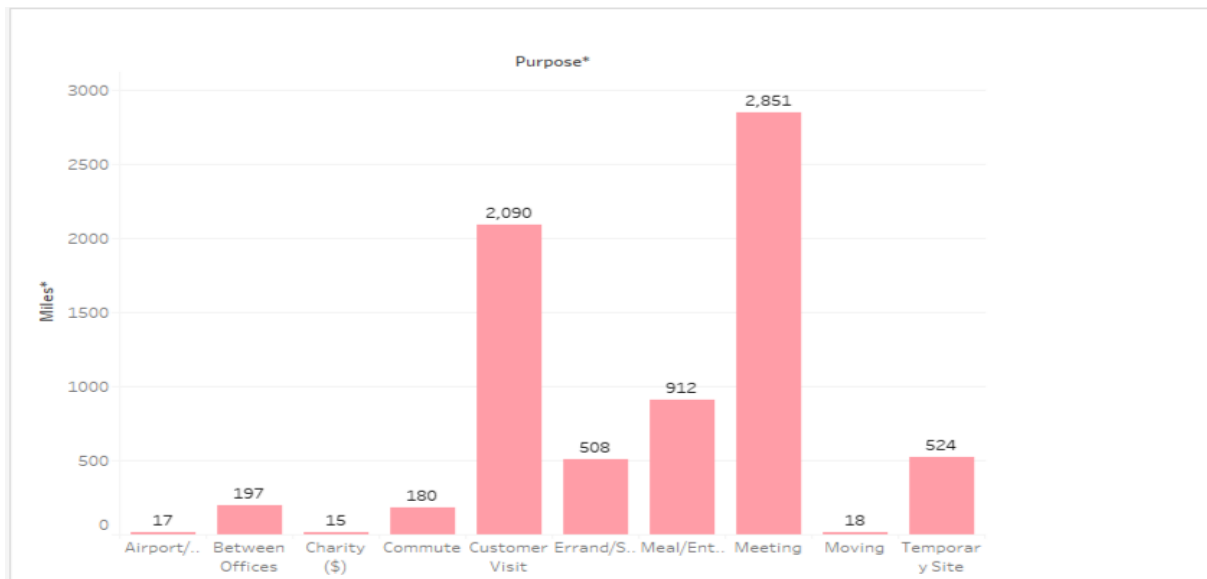
STORY 1

Story 1



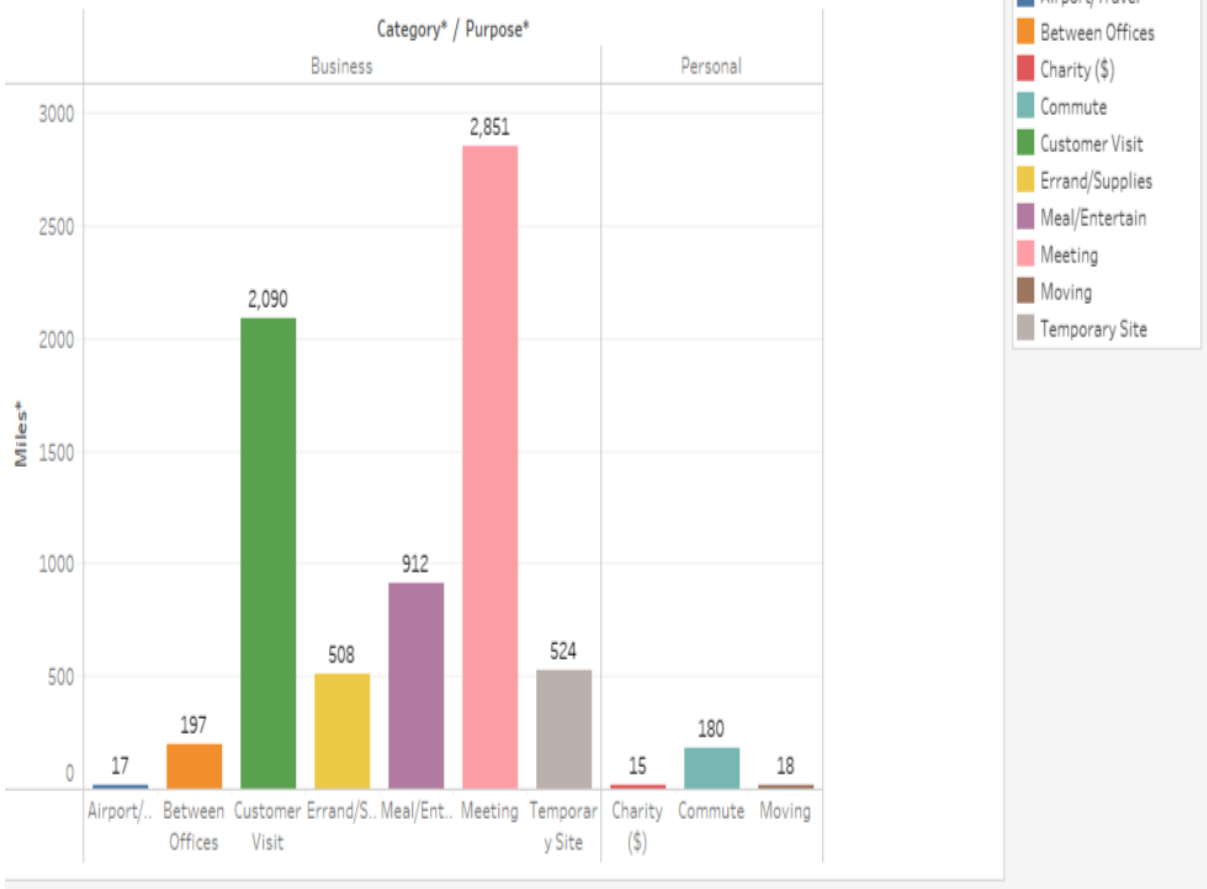
VISUALIZATIONS

Sheet 1

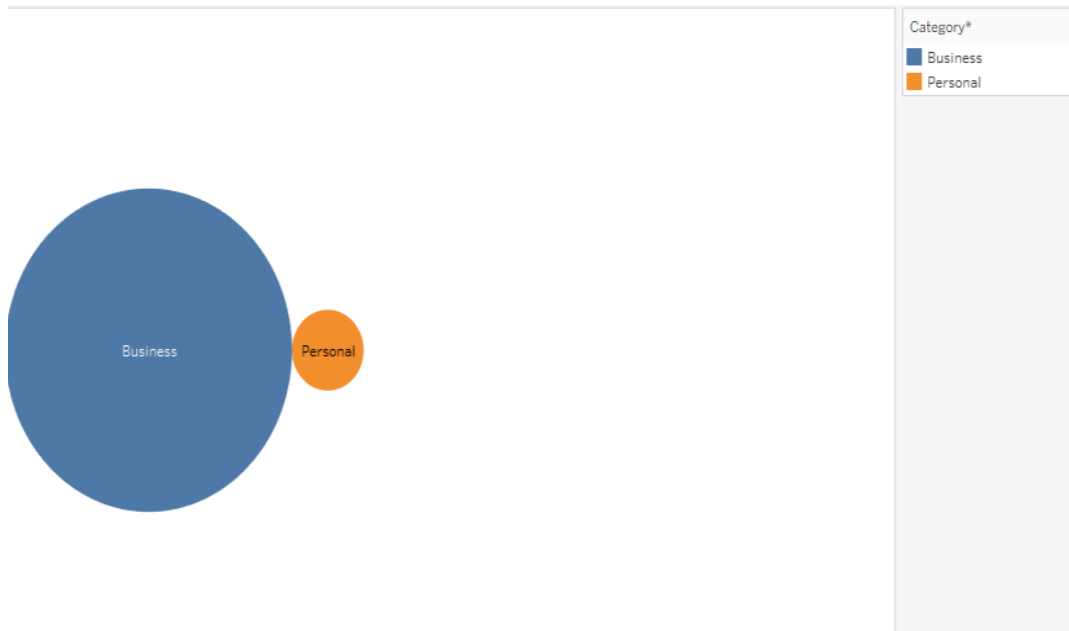


Sheet 2

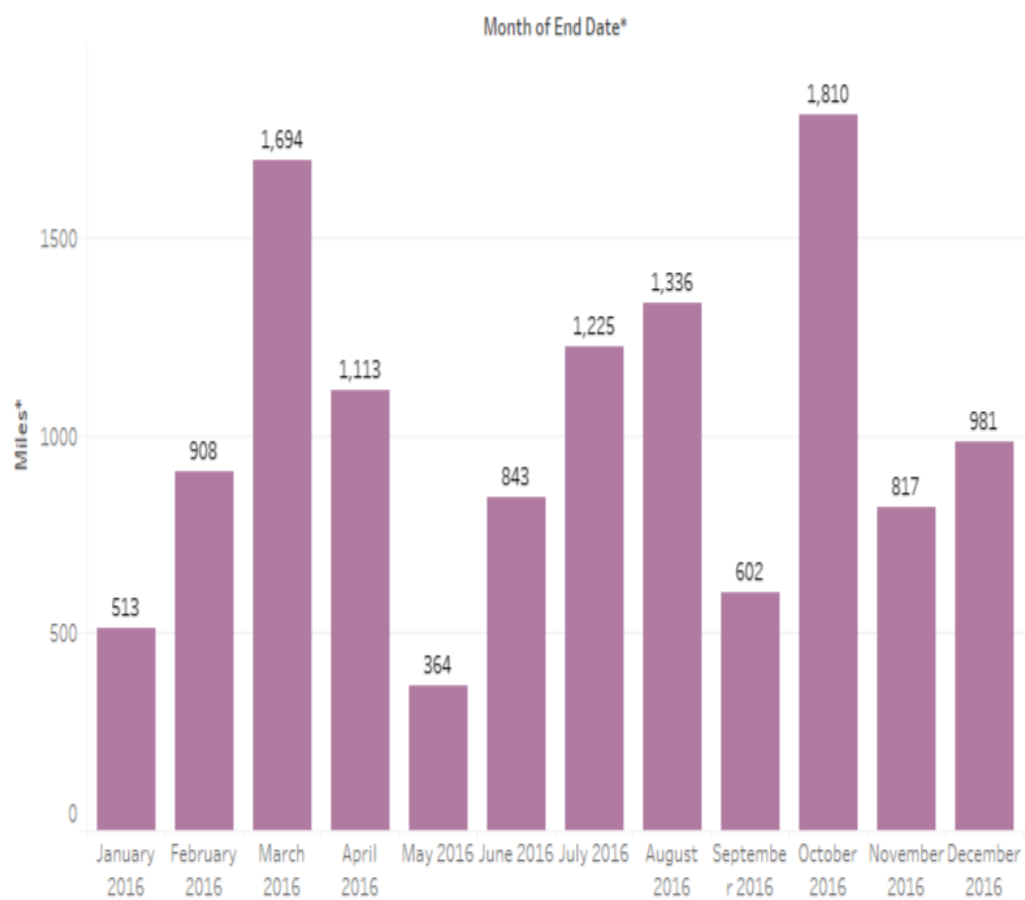
Sheet 2



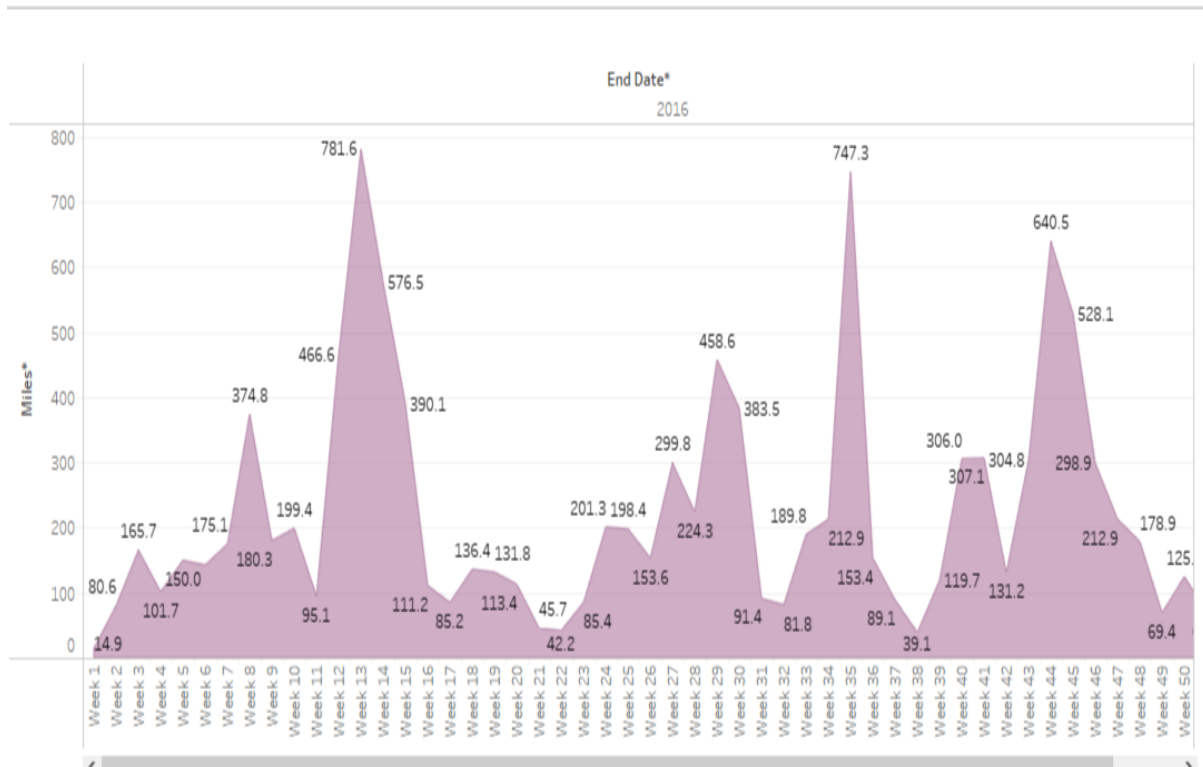
Category of Miles



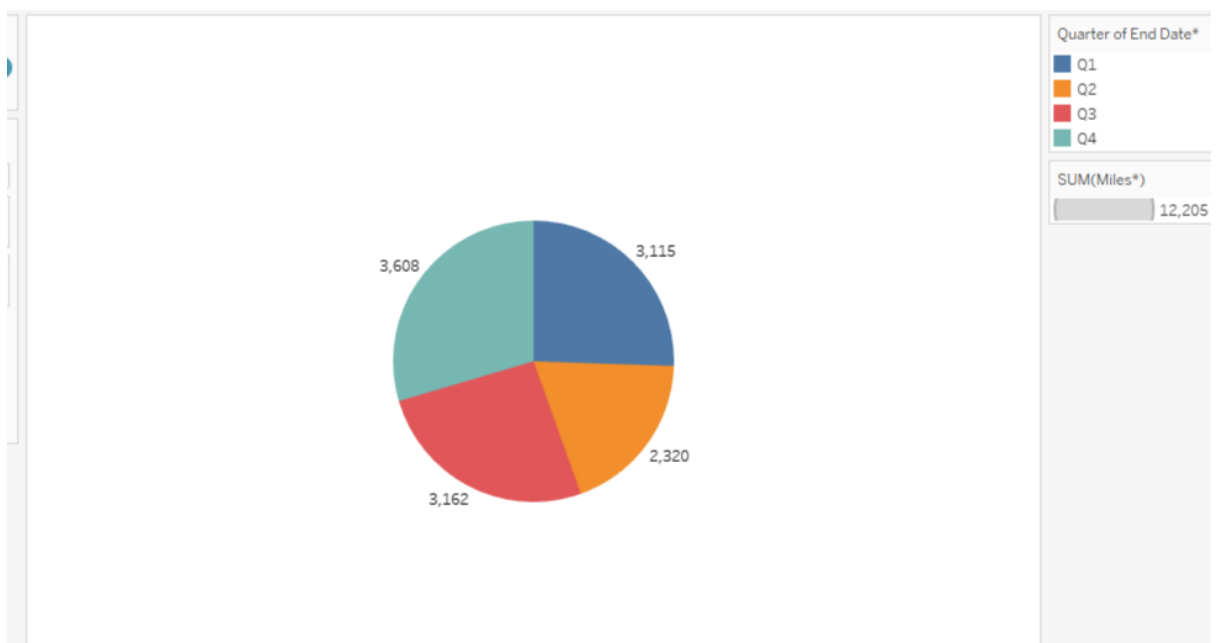
Month Wise Miles



Sheet 5

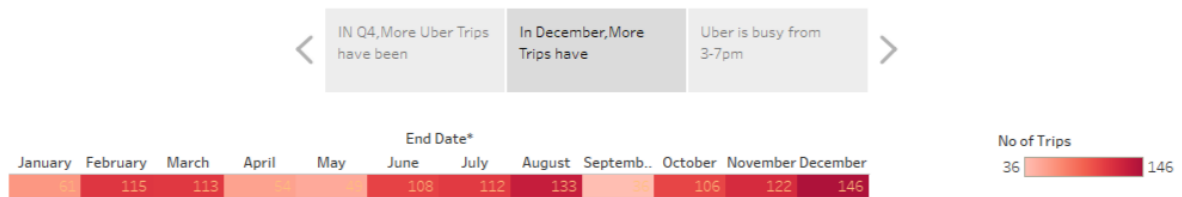


Quarter Wise Miles

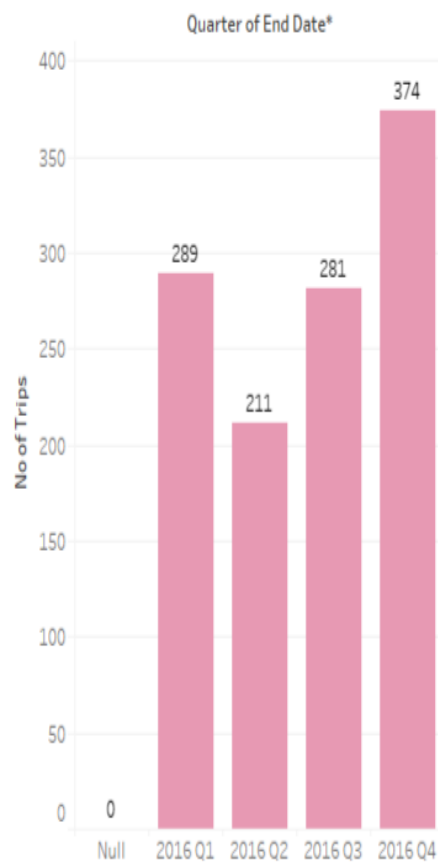


Number of Trips Per Month

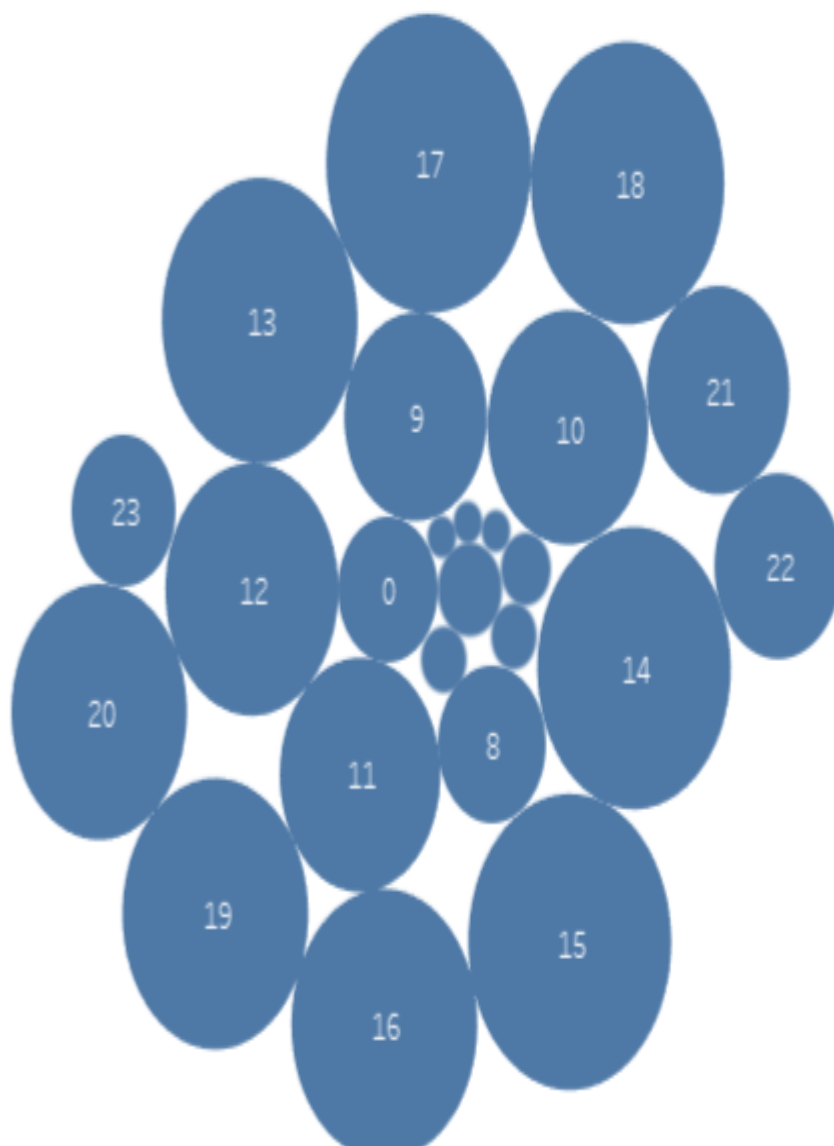
Story 1



Quarter Wise Tips



Hour Wise Analysis



4.ADVANTAGES &DISADVANTAGES

Advantages:

The pros of being an Uber driver include having the freedom to pick your hours, meeting new people, and earning some income, while the cons include competing for rides, paying for gas and car maintenance, and possible negative reviews.

- Vehicle financing. Our partnerships with car agencies give help driver-partners start or grow their own business. ...
- Phone plans. When you drive with Uber, your phone is where you run your business. ...
- Car insurance. Every trip is insured with no extra cost to you, while you are connected to the Uber app.



Disadvantages:



- Increased competition among driver.
- The need to maintain a vehicle that meets Uber's standards.
- The possibility of receiving negative reviews.
- Expenses for gas, maintenance, and insurance.
- Uncertainty about the payment rate for each ride.

5.CONCLUSION

Based on the MIP model results and interpretations, the team is able to claim that it brings meaningful value to an Uber driver in terms of expected revenue. There is a positive relationship between the number of time blocks prescribed by the model and the expected revenue for the driver. In order to increase their revenue, a driver should be available for as many time blocks as possible. Drivers now have a leg up on other drivers by making data-driven decisions as opposed to using heuristics for picking “optimal” locations to serve clients. With the feasible and convenient schedules that the model prescribes, drivers can now envision their job as a lucrative business with a competitive advantage.

6.FUTURE SCOPE

Let us get into the post to know more about the Uber-like on-demand business, The current world is witnessing many advancements and a lot of startups are evolving rigorously in the world for the past few years. All because of the emergence of on-demand ideas in the current business world with a lot of opportunities. The on-demand apps assist you to order or book anything from anywhere.

The on-demand business also aids many [startups to earn more profits](#). Even more traditional businesses have adopted on-demand business to increase their profits tremendously.

With this spark, some of the creative-minded startups have focused their vision on the on-demand business. If you are the one having any on-demand business idea on your mind and want to reach your target audience like Uber, then this might be the perfect blog to understand the future scope and demands of the [on-demand business](#),



7.APPENDIX

Github Link:

<https://github.com/Ma1510/-Uber-Analysis/blob/main/README.md>

Dashboard 1:

https://public.tableau.com/views/MATHUMITHA_16976165463760/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Dashboard 2:

https://public.tableau.com/views/MATHUMITHA_16976165463760/Dashboard2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Story:

https://public.tableau.com/views/MATHUMITHA_16976165463760/Story1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link