DATA ANALYTICS USING TABLEAU

Voyage Vista: Illuminating Insights from Uber Expeditionary Analysis

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CONTENTS:

- > INTRODUCTION
- ➤ Overview
- **>** Purpose
- > PROBLEM DEFINITION & DESIGN THINKING
- > Empathy Mapping
- **➤ Ideation & Brainstorming Mapping**
- > RESULT
- ➤ Dashboard
- **>** Story
- > ADVANTAGES & DISADVANTAGE
- ➤ Advantages
- **➤** Disadvantages
- > APPLICATIONS
- > CONCLUSION
- > FUTURE SCOPE

> INTRODUCTION

> OVERVIEW

The ride-sharing business revolutionized a business model that had been functioning in the same way for generations: On a busy city street, a person in need of a ride stood on a street corner and waved down a taxi. On quieter streets, or in towns without roving taxis, the person would phone a local car service and request a pickup. Uber Technologies, Inc. (commonly referred to as Uber) provides ride-hailing services, food delivery, and freight transport. It is headquartered in San Francisco and operates in approximately 70 countries and 10,500 cities worldwide. The company has over 131 million monthly active users and 6 million active drivers and couriers worldwide and facilitates an average of 25 million trips per day. It has facilitated 42 billion trips since its inception in 2010 and is the largest ride sharing company in the United States. 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 sharing economy, supplying a means of connecting existing resources instead of providing the physical resources themselves. The company was founded by Travis Kalanick and Garrett Camp in 2009, and is headquartered in San Francisco. The company has an estimated 110 million users worldwide.

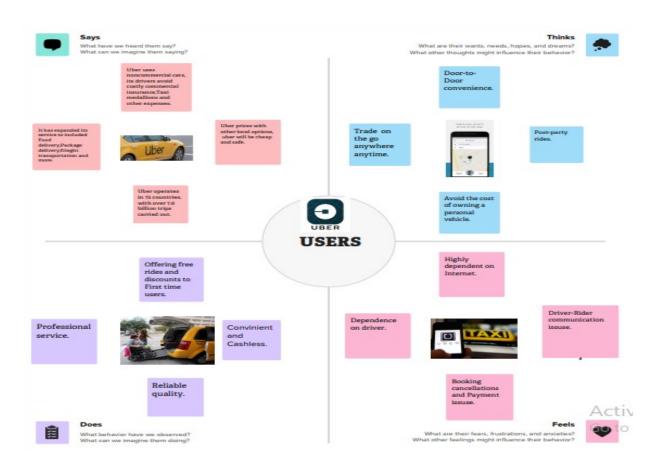
> PURPOSE

Uber links passengers with drivers using the Uber app. Generally, the drivers own their own car. The company does also offer rental or lease on cars through third party partners like Hertz, Get Around and Fair. UberFleet is an app for those managing squads

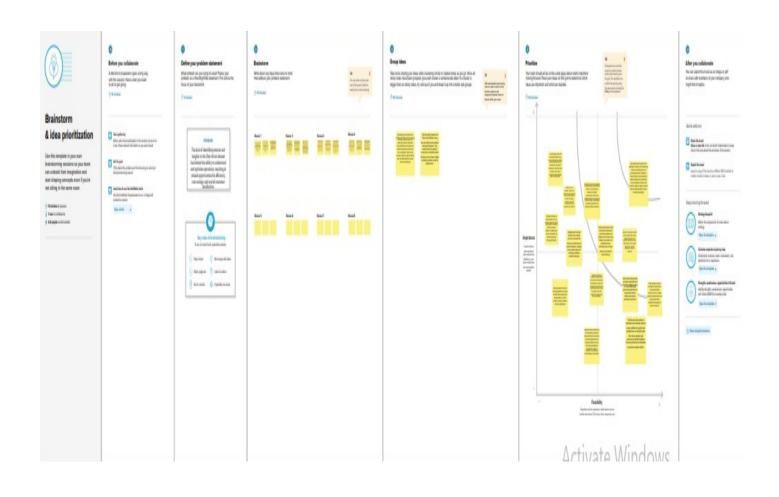
of drivers. Uber offers rides under a dynamic pricing model for both drivers and passengers. Passengers needing a ride can use the app to hail a driver with an estimated price that is dependent on the destination as well as the demand at the time. Uber incentivizes drivers to pick up more fares in peak busy hours by paying more during those times. This means that riders are charged more at busy times in order to help ensure the needed number of drivers are available. During holidays, such as New Year's Eve, a passenger can expect to pay a high price. However, unlike with a taxi, they can expect that the price will attract a driver, as opposed to a car that might never have shown up from a taxi service.

> PROBLEM DEFINITION AND DESIGN THINKING

> EMPATHY MAP

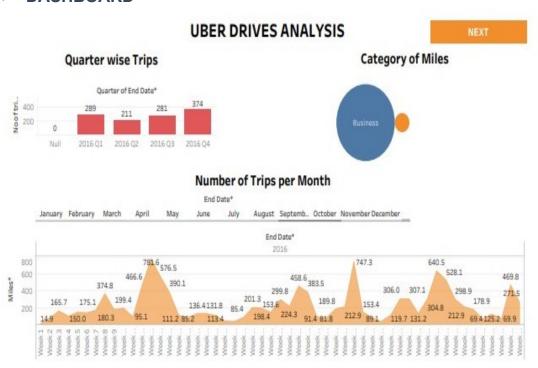


➤ IDEATION & BRAINSTORM MAP



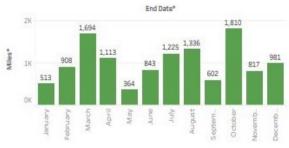
> RESULT

> DASHBOARD





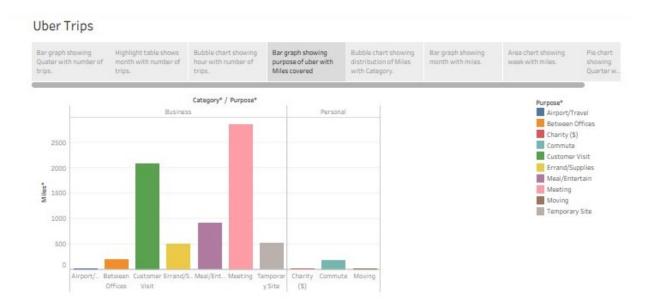




> STORY

Uber Trips





> ADVANTAGES AND DISADVANTAGES

ADVANTAGES

➤ 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.

➤ Professional Service

- Drivers for Uber may use their own cars and bikes. 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.

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

➤ Safer and Flexible

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

DISADVANTAGE

> 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 it is too costly during rush hour.

> 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 pocket.
- 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.

➤ 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.

> APPLICATION

- ➤ Real-time tracking of drivers :Uber addressed one of the main problems of traditional taxis the inability for users to fully understand when the driver will arrive at the pick-up location. The app allows users to track drivers in real-time with the help of GPS integration. Uber is a GPS-heavy application with many features depending on this technology.
- > Split the fare: When riding Uber with other riders, users can split the cost with other riders. Uber charges all credit cards equally plus a small transaction fee. The Split Fare improves customer experience as riders don't have to pay with cash.
- Multiple drop-off locations: Another useful option when traveling with friends is the ability to choose multiple drop-off locations. When booking a ride, users can add multiple locations where the driver will need to make along the route. They can also change the route on the go and add or change drop-off locations. Along with such changes, the fare for the trip is also automatically changed.
- Multiple payment options: The more payment options you provide, the better the user experience. Uber offers both online and offline payment options. Users can pay for a ride with cash, with their credit card, or even using a mobile wallet. This is one of the key Uber app features for a clone of Uber.
- ➤ Preferred driver: Many riders use such apps as Uber on a regular basis to get to their offices and back home in the evening. After making a few rides, users usually start having preferences when it comes to drivers. This is one of the important features of the Uber app that you should include in ridesharing app development.
- ➤ In-app chat or call option: Messaging should be included in the Uber app feature list. In some situations, users might need to get in touch with drivers to help them find the pick-up location or to learn about their whereabouts. The in-app chat or call option will make it possible.

> CONCLUSION

The project "Voyage Vista: Illuminating Insights from Uber Expeditionary Analysis" which can be accomplished by "Data Analytics by Tableau" has various milestones. Milestone 1 was completed by creating Empathy Mapping, brainstorming, and Idea prioritization by using Mural which is a system that offers a workspace to collaborate and contribute innovative ideas as teamwork and uploaded in GitHub which is an internet hosting service for software development and version control using Git. Repositories can be created and uploaded files into it. Milestone 2 was completed by collecting the dataset, storing the database in My SQL Workbench, and connecting the database with Tableau. Milestone 3 was completed by 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 is 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. This involves a 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. Milestone 5 is to respond and design a 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. Milestone 6 was completed by creating **No Scenes of Story.** A data story is a way of presenting data and analysis in a narrative format, intending to make the information more engaging and easier to understand. 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. 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. Milestone 7 is to accomplish performance testing which includes utilization of Data Filters, and No of Visualizations or Graphs. Milestone 8 was completed by **Publishing**. The first step is to **publish the dashboard**, **story and reports** to the Tableau public. Milestone 9 was completed by recording an explanation Video for the project's end-to-end solution and making Project Documentation- Step by step project development procedure. This project concludes that to use data Analyzing techniques to find unknown patterns in the Uber Drives dataset can be easily analyzed by **Data Analytics with Tableau**.

> FUTURE SCOPE

➤ Scopes grant permission to various API endpoints for your app. When requesting an access token to use on behalf of a user, your application will specify which scopes it needs and these will be shown to the user during the OAuth flow. It's

- best to limit the scopes you need to the bare minimum so that users can feel confident with your app and the amount of data it can access
- ➤ The company expects by 2021, around 539.49 million users will use its taxi services. The tremendous success of Uber can be attributed to its simple and unique business model and its ability to offer an easy cab booking experience to customers with diverse transportation needs.
- ➤ Uber, a transportation network company based in San Francisco has revolutionized the transportation of people. Set up 9 years ago, the company has grown impressively and now operates in about 632 cities across 78 countries.
- Having 75 million active users, Uber manages 15 million rides daily. The company expects by 2021, around 539.49 million users will use its taxi services. The tremendous success of Uber can be attributed to its simple and unique business model and its ability to offer an easy cab booking experience to customers with diverse transportation needs.
- Uber's location based cab and ride sharing app offers useful features for the passengers like pick up and destination address, taxi arrival estimated time, real-time cab tracking, automated e-receipts, SOS, driver details, ratings and reviews and multiple payment options. Similarly, its app offers various useful features for the drivers and admin.
- ➤ Millennials form a majority of such users who are well versed in using mobile phones and want affordable cab services for their transportation needs as they do not have enough money to buy a car of their own.
- ➤ Apart from these users, there are others who, in spite of having their own car, want to utilize ride-hailing apps for traveling to the airport, attending key business events or private parties, etc.
- This would help them avoid the hassle of driving their car and parking it. Still, there are users who want to share a ride with other users in their area for paying a reduced fare. But for the success of their new cab and ride sharing business, entrepreneurs need to have a unique, simple and scalable business model that can adapt to the changing market needs.

- Also, they should have a user friendly taxi app that has all the useful features for their customers to allow them to easily book a cab. The app should also have the essential features for their drivers and for the proper and effective management of their business. If you too want to get built such an app for your new cab business, you can bank upon Matrid Technologies, a leading and established mobile application development company in India.
- ➤ Its expert and creative app developers are capable of transforming your unique business idea into a high quality and easy to operate cab and ride sharing app that will play a key role in your business's growth and success.