Here is your complete, polished **Data Storytelling Script** for the **Uber Trip Analysis Project**, integrating every part of your workflow: from data cleaning (CSV), SQL exploration, to final Power BI dashboards. This version is ideal for **presentations, interviews, LinkedIn videos, or portfolio walkthroughs** — and it reads naturally, like your own voice.

🎤 Data Storytelling Script: Uber Trip Analysis with SQL & Power BI

👨‍💼 1. Introduction: Setting the Context

Hello! I'm **Mohammad Ali**, and I'm excited to walk you through a real-world analytics project I completed — analyzing **over 103,000 Uber trips** using a combination of **SQL**, **Power BI**, and **data cleaning techniques**.

This project was designed to simulate a real business scenario: **"How can a ride-hailing company optimize their operations and customer experience based on trip data?"**

🩹 2. Data Understanding & Cleaning

I started with a **raw dataset in CSV format** containing over 100,000+ Uber ride records. It included fields like:

- Pickup & drop-off locations and cities
- Trip distance & duration
- Vehicle types (UberX, Comfort, Black, Green, XL)
- Payment methods
- Fare and surge fee

I cleaned the data by:

- Removing duplicates and null values
- Standardizing location and city names
- Extracting hour from pickup time for time-based analysis
- Creating meaningful columns like **Total Revenue = Fare + Surge Fee**

🛠️ 3. SQL-Based Exploratory Data Analysis

Next, I ran detailed **SQL queries** to explore patterns and generate insights. Some key examples:

◇ **Basic Analysis:**

- Counted total trips: `103,000+`
- Found peak hours: most rides between **2 PM and 6 PM**
- Identified that **UberX** had the highest usage
- Analyzed preferred payment method: **Uber Pay (67%)**

◇ **Intermediate to Advanced Queries:**

- Ranked top pickup-drop-off pairs (e.g., *Penn Station → Upper East Side*)
- Calculated revenue by city

- Average surge by payment type
- Tracked trips from Manhattan to Queens
- Ranked payment methods and calculated **average fare/minute by vehicle**

SQL helped me structure the story before building visuals — giving me confidence about the data's meaning and business value.

📊 4. Dashboard Design in Power BI

Once the data was ready, I imported it into **Power BI** to create an interactive dashboard split into **three key pages**:

📍 A. Overview Dashboard

This section gives a high-level snapshot:

- **Total Bookings**: 103,044
- **Total Revenue**: $1.54 million
- **Average Trip**: 3 miles, 16 mins, $14.90
- **Most Used Vehicle**: UberX (38K+ trips)

◇ **Top Pickup Point**: Penn Station / Madison Sq West ◇ **Top Drop-off**: Upper East Side North ◇ **Longest Ride**: 144 miles (Lower East Side → Crown Heights North)

Also added breakdowns by:

- **Payment Type**: Uber Pay, Cash, Amazon Pay
- **Trip Type**: Day (65%) vs. Night (35%)
- **Vehicle Usage**: UberX, Comfort, Green, Black, XL

⏱️ B. Time Analysis Dashboard

Focused on trends by hour and day of the week:

- Ride volume surges **between 2 PM to 6 PM**
- **Sunday and Tuesday** are the busiest days
- Used **heatmap matrix** to show ride density by hour & day

This helped identify when and where demand peaks, which is critical for **fleet optimization and marketing campaigns**.

📋 C. Detailed Trip Table

This page includes:

- Full trip-level data (filterable by vehicle, city, time)
- Useful for auditing or slicing by business unit

- Helps drill down into customer behavior

🔍 5. Key Insights & Findings

Here are some data-driven discoveries:

- **UberX** accounts for over **37%** of bookings
- **Afternoon rides** and **weekends** are in highest demand
- **Uber Pay** dominates with **67%** of payment share
- A few city zones like **Penn Station & Upper East Side** handle most traffic
- Only **a few vehicle types** generate the majority of revenue

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💡 6. Strategic Recommendations

Based on this analysis, I proposed:

1. 📊 **Boost UberX fleet** in peak zones and times
2. 🎶 **Encourage night trips** with promo codes or discounts
3. 💳 **Push Uber Pay adoption** with loyalty points
4. 📍 **Improve driver allocation** near high-traffic locations
5. 🕒 **Launch campaigns** between 2 PM–6 PM on weekends

☑️ 7. Conclusion

This project helped me sharpen key skills:

- **Data storytelling and insight generation**
- **DAX-based KPI building in Power BI**
- **SQL querying for data exploration**
- **Dashboard UX & business communication**

More importantly, it showed how data can support **real business decisions** in the transportation and mobility sector.

🎯 8. Final Words

Thank you for listening to my Uber Trip Analysis journey! I'm passionate about building data solutions that **bridge raw numbers with real action** — and this was a great opportunity to do just that.

If you have feedback or want to collaborate on similar projects, feel free to connect!

Would you like me to create this as a **PDF**, **LinkedIn video script**, or **2-minute voiceover draft** next?