**هنعمل اربعه داش بورد   
overview analysis**دي هيبقا فيها كل حاجه في الدات بس نظره عامه

**Customer behavier**

دا هيبقا فيه كل حاجه متعلقه بيهم

**Operation performance**   
كل حاجه متعلقه بوقت الرحله

**Customer satisfaction and refund**

اسباب رفض الرحله

**Overview Analysis:**

* How has buy tickat changed over time (daily, weekly, monthly trends)?
* What is the distribution of ticket prices? Are there peak price periods?
  1. هعمل line chart في الاربع الشهور بالايام ونعرف منها بيع التذاكر في الايام والشهور ماشي اذاي
* Which stations generate the highest buy tickat?
* هنشوف اكتر المحطات بيع تذاكر ونستنتج من خلالها اي محطه بتبقا اكتر اذحاما
* What is the average spending per passenger?
  1. 🡪عن طريق هنعمل كولوم هنسميه spending دا هيبقا فيه( Departure Time) - (Actual Arrival Time ) وعن طريقه هنعرف كل رحله اشتغرقت وقت ادايه
* How does revenue differ between ticket classes (Standard vs. Premium)?
* 🡪نشوف السنب بين ال first vs standard عن طريق pie or bar
* Which payment method is used the most, and does it impact ticket price or frequency of purchase?
* هنا هنعرف اكتر اداه مستخدمه في الدفع

**Customer Behavior:**

* Which age group or customer segment buys the most tickets ( by Railcard)?

في الجزء دا انا بقترح

* Do passengers who purchase online have different buying habits compared to those who buy at the station?  
  وهنا هنشوف اكتر حاجه متباعه اونلاين مثلا وندرسها
* What is the most common journey length (short vs. long-distance trips)?

Are passengers more likely to purchase tickets for round trips or one-way journeys?

هنا هنشوف اغلب الناس الي بيشتروا تذاكر اطول بيسافره فتره طويله ولاصغيره عن طريق الكولوم sending

* Which ticket types (Advance, Anytime, etc.) are preferred during peak vs. off-peak times?

هنعرف هنا في اوقات الزحمه هنعرف اي انواع التذاكر الي متباعه

* What percentage of customers use railcards, and which railcard type is most used?

هنا هنشوف اكتر الناس الي بيستعمله الخصومات

* Is there a correlation between ticket price and journey duration?

هنا هنشوف العلاقه بينهم وممكن نقترح اي هنا

**Operational Performance & Efficiency:**

1. What is the average delay time per journey?
2. Which time slots (morning, afternoon, night) have the most delays?
3. Which stations experience the highest number of delays?
4. What percentage of delays exceed 30 minutes? 1 hour?
5. Are delays more common during certain seasons or months?
6. What percentage of delayed journeys result in missed connections (if data available)?
7. How does the actual arrival time compare to the scheduled arrival time for different routes?

**Customer Satisfaction & Refunds:**

1. How often do delayed journeys lead to refund requests?
2. Are refunds more common for certain ticket types or payment methods?
3. What is the percentage of refund requests that get approved?
4. Do customers who experience delays tend to avoid booking certain routes later?
5. Are there specific routes where customers request refunds more frequently?
6. How much revenue is lost due to refunds?
7. Is there a correlation between refund requests and ticket class?

**Key Performance Indicators (KPIs):**

1. **Total Revenue**
2. **Average Ticket Price**
3. **On-Time Performance (%)**
4. **Delay Rate (%)**
5. **Most Frequent Route**
6. **Refund Rate (%)**
7. **Peak Purchase Hours**
8. **Delay Duration (if calculable)**
9. **Top Delay Reasons**
10. **Revenue by Ticket Type**