Food Delivery Performance Dashboard

A Data Analytics Project Using Microsoft Power BI

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Tool Used: Microsoft Power BI
Dataset Type: Food Delivery App Orders (Custom Created, 200 Records)

Project Overview

This project focuses on building a fully interactive **Food Delivery Performance Dashboard** using **Microsoft Power BI**. The aim is to analyze real-time delivery operations, customer behavior, order patterns, and revenue performance.

The dashboard highlights the key metrics that help understand business performance, identify trends, and support better decision-making. It showcases my ability to work with data cleaning, transformation, visualization, and storytelling — skills that are essential in a data analytics role.

Dataset Description

A custom dataset containing **200 food delivery orders** was used for this project. The dataset is designed to simulate real-world operations similar to Zomato or Swiggy.
It includes the following fields:

- **OrderID**
- **OrderDateTime**
- **CustomerID**
- **City**
- **FoodCategory**
- **RestaurantName**
- **OrderAmount**
- **Discount**
- **Profit**
- **DeliveryTime_minutes**

- **DeliveryDistance_km**
- **OrderStatus**
- **CustomerRating**
- **DeliveryPartnerID**

The dataset was ideal for analyzing delivery trends, revenue patterns, and category-level performance.

Data Cleaning & Preparation

To ensure accuracy and consistency, the following steps were performed:

- Removed duplicate records
- Corrected data types (DateTime, numeric fields, text fields)
- Converted OrderDateTime into proper date-time format
- Created key metrics such as **Profit**
- Added new fields internally like Month/Week for trend analysis
- Ensured clean category names and consistent formatting
- Verified all numeric columns for correct aggregation behavior

These steps helped prepare the data for building a clean and reliable dashboard.

Dashboard Components

The final dashboard includes:

Key KPIs

- Total Orders
- Total Revenue
- Total Profit

Visualizations

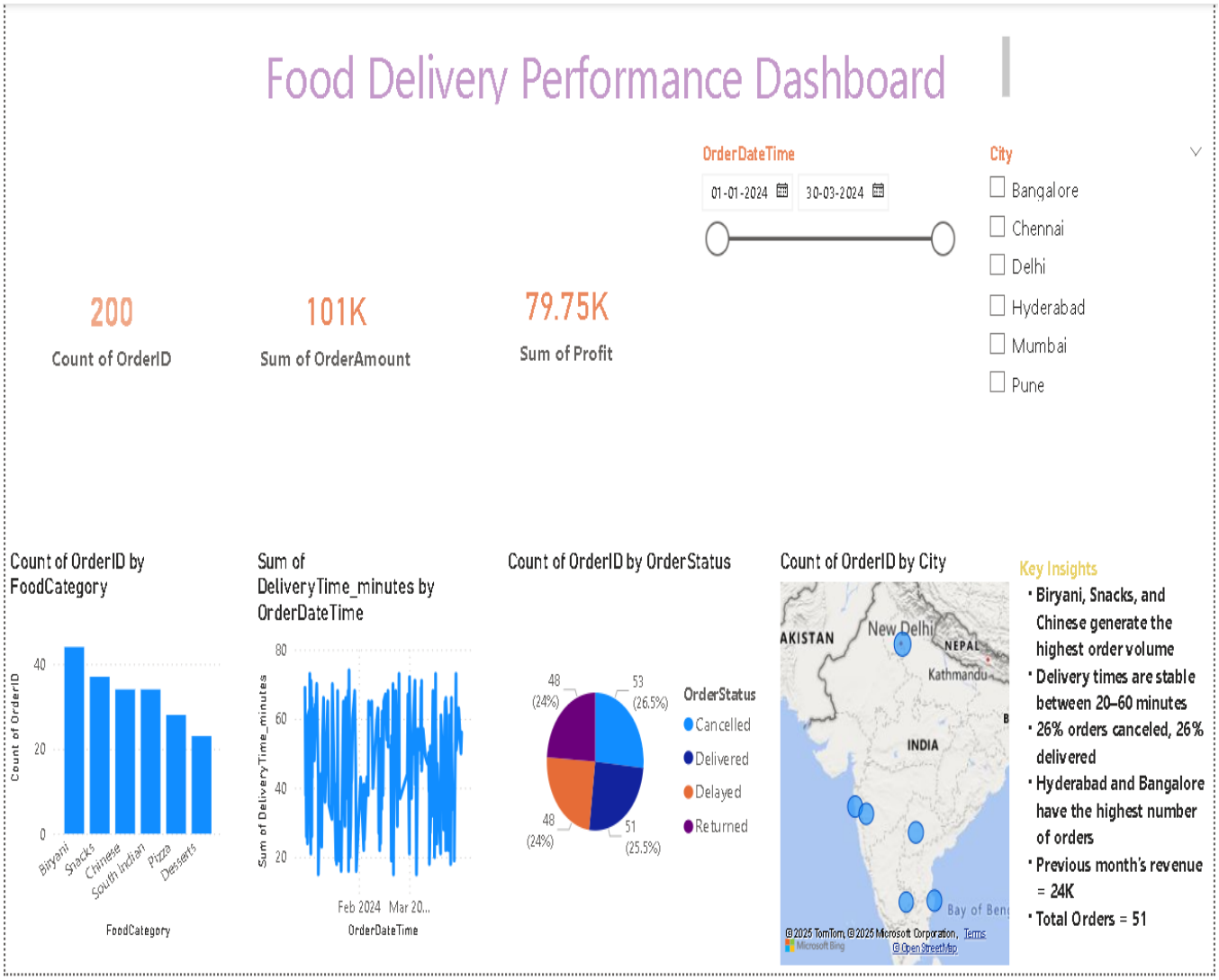
- Line chart (Delivery Time Trend)
- Pie chart (Order Status Distribution)
- Map chart (Orders by City)
- Slicers (Date & City)

Interactivity

All visuals are connected and update dynamically when filters are applied.

The dashboard layout is designed to be clean, intuitive, and visually appealing with consistent colors and spacing.

Final Dashboard



Key Insights

The dashboard provides several important observations:

- **Biryani, Snacks, and Chinese** are the most frequently ordered food categories, indicating strong customer preference.
- **Delivery times remain consistent between 20–60 minutes**, showing stable operational performance.
- **Order Status Distribution:**
    - **26% delivered**,
    - **26% cancelled**,
    - and the remaining include delayed and returned orders.
- **Hyderabad and Bangalore** recorded the **highest number of orders**, making them strong-performing regions.
- **Previous month's revenue is approximately ₹24,000**, indicating moderate monthly financial activity.
- During the selected period, a total of **51 orders** were recorded.

These insights help identify strengths (popular categories, top cities) and areas for improvement (cancellations, delivery delays).

Challenges & Solutions

During the project, a few challenges were encountered and resolved:

Challenge 1:

The Map visual was disabled due to security settings.
Solution: Enabled map visuals through *File → Options → Security → Enable Map and Filled Map Visuals*, then restarted Power BI.

Challenge 2:

OrderDateTime was automatically converting into a Date Hierarchy.
Solution: Removed the hierarchy and selected the direct DateTime field to create a proper trend line.

Challenge 3:

Some visuals were applying unwanted filters to KPIs when clicked.
Solution: Removed cross-filter interactions and cleared all slicer selections.

Challenge 4:

Layout alignment was uneven.
Solution: Enabled gridlines and adjusted spacing to create a cleaner, more professional design.

Conclusion

This project demonstrates my ability to work end-to-end on a data analytics assignment — from dataset creation, cleaning, and transformation, to building a visually appealing, interactive dashboard.

The insights generated help understand:

- Regional demand
- Customer preferences
- Delivery performance
- Revenue trends
- Overall operational effectiveness

Through the use of Power BI, I was able to turn raw data into actionable insights that can support business decision-making. This dashboard represents the analytical thinking and visualization skills required for a data analytics role.

Dashboard File Link (GitHub)

You can access the full Power BI dashboard and dataset here:

GitHub Repository: https://github.com/kasiviswanadh123/Food-delivery-dashboard

Note:

To view the dashboard, please download the .pbix file in github and open it using Microsoft Power BI Desktop.