

Bike Sharing Analytics



Information available in audio.

Agenda

- Problem Statement
- Approach
- Data Overview
- Project Workflow
- Exploratory Data Analysis
- Key Insights
- Recommendations
- Dashboard Preview

PROBLEM STATEMENT

Bike-sharing companies generate large amounts of operational data, but raw data alone does not provide clear business insights.

The key problems are:

- ◆ Understanding yearly revenue and profit performance
- ◆ Identifying growth trends between years
- ◆ Supporting business decisions using data

APPROACH

- ◆ Data extracted and analysed using SQL
- ◆ Data cleaned and modelled in Power BI
- ◆ Key metrics created using DAX
- ◆ Interactive dashboard designed for business users
- ◆ Business insights derived from yearly performance analysis

DATA OVERVIEW

Dataset Description:

- ◆ Bike-sharing operational data
- ◆ Time-based data covering multiple years
- ◆ Rider and revenue-related information

Key Columns:

- ◆ Date and Year
- ◆ Number of riders
- ◆ Revenue and profit

PROJECT WORKFLOW

1. Data collection from SQL source
2. Data cleaning and transformation
3. Data modelling in Power BI
4. Creation of calculated measures (Revenue, Profit, Growth)
5. Dashboard design and visualisation
6. Insight generation from yearly performance analysis

KEY INSIGHTS

- Revenue increased significantly from 2021 to 2022
- Profit growth followed a similar upward trend
- Rider demand increased from 2021 to 2022

RECOMMENDATIONS

Based on the analysis:

- Focus marketing efforts during peak hours
- Optimise pricing strategies during high-demand periods
- Expand bike availability in high-usage time slots
- Use historical trends for future demand forecasting
- These actions can help improve profitability and customer experience.

DASHBOARD PREVIEW

Dashboard Features:

- Total Revenue and Total Profit KPIs
- Year-wise performance summary
- Revenue growth percentage
- Interactive year slicer
- Clean and user-friendly layout
- The dashboard allows stakeholders to make quick, data-driven decisions.

CONCLUSION

- The project successfully analysed bike-sharing business performance
- Power BI enabled interactive and clear visualisation
- The dashboard provides valuable insights for business growth



Thank You