Title :- Swiggy Dashboard

Introduction

The project focuses on developing a Swiggy Dashboard using Power BI to analyze order trends, user engagement, and city-wise performance. It provides key performance indicators (KPIs) and data analytics to help businesses make informed decisions.

Objectives

- To analyze Swiggy's data for business insights.
- To visualize key performance metrics such as orders, users, ratings, and city-wise sales.
- To track food category trends and yearly sales performance.
- To enhance data-driven decision-making using Power BI.

Tools & Technologies Used

- Power BI for data visualization.
- Excel/CSV files as data sources.
- DAX (Data Analysis Expressions) for data modeling.
- ETL (Extract, Transform, Load) techniques for data preparation.

Data Sources & Processing

- Swiggy order and user data are loaded into Power BI.
- Data cleaning is performed to remove inconsistencies.
- Data transformation includes aggregation and normalization.
- Measures and calculated columns are created using DAX.

Key Features of the Dashboard

- Overview Section: Displays key metrics such as orders count, users count, ratings, and top customers.
- Category-wise Analysis: Comparison of Veg, Non-Veg, and Other food items based on order count and average price.
- City-wise Performance: Analyzes top-performing cities based on order quantity.
- Yearly Trends: Line graph showing the total quantity amount by year.
- Interactive Filters: Users can filter data by city, top orders, and food categories.

Data Visualizations

- Card Visuals: Display key statistics like order count, users, and ratings.
- Bar Charts: Show city-wise order quantities.
- Line Graphs: Represent yearly trends in order amounts.
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- Pie Charts: Segment food categories (Veg, Non-Veg, Others).
- Heatmaps: Show order density in different regions.
- Geo Maps: Visualize customer distribution across cities.

Insights & Findings

❖ High Engagement Cities

- Some cities contribute a significantly higher number of orders compared to others.
- Electronics City has the highest order volume at 0.36M.

❖ Veg vs. Non-Veg Trends

- Veg items have an average price of 182.1, while Non-Veg items average 231.8.
- Non-Veg orders are slightly lower in count but generate higher revenue per order.

❖ Declining Trend in Recent Years

- Sales figures peaked in 2018 with nearly 1M orders but have declined in recent years.
- The reasons may include market saturation, competition, or changes in customer behavior.

❖ Top Customers

- A small percentage of customers generate a significant share of orders.
- The top 10% of customers contribute 725M orders.

Challenges & Solutions

❖ Data Inconsistencies

- Challenge: Raw data contained missing values and duplicate entries.
- Solution: Cleaned and formatted data using Power BI’s Power Query.

❖ Handling Large Datasets

- Challenge: Performance issues while handling large datasets.
- Solution: Used aggregation, indexing, and data partitioning.

❖ Ensuring Accuracy

- Challenge: Data mismatch due to incorrect mappings.
- Solution: Cross-validation of data with sample sets and historical records.

Future Enhancements

❖ Integration with Live Data

- Connect the dashboard to a real-time database to monitor live orders.

❖ Predictive Analytics

- Use machine learning models to forecast future order volumes.

❖ Advanced Filters & Drill-downs

- Improve interactivity by allowing users to drill down into city and customer-specific data.

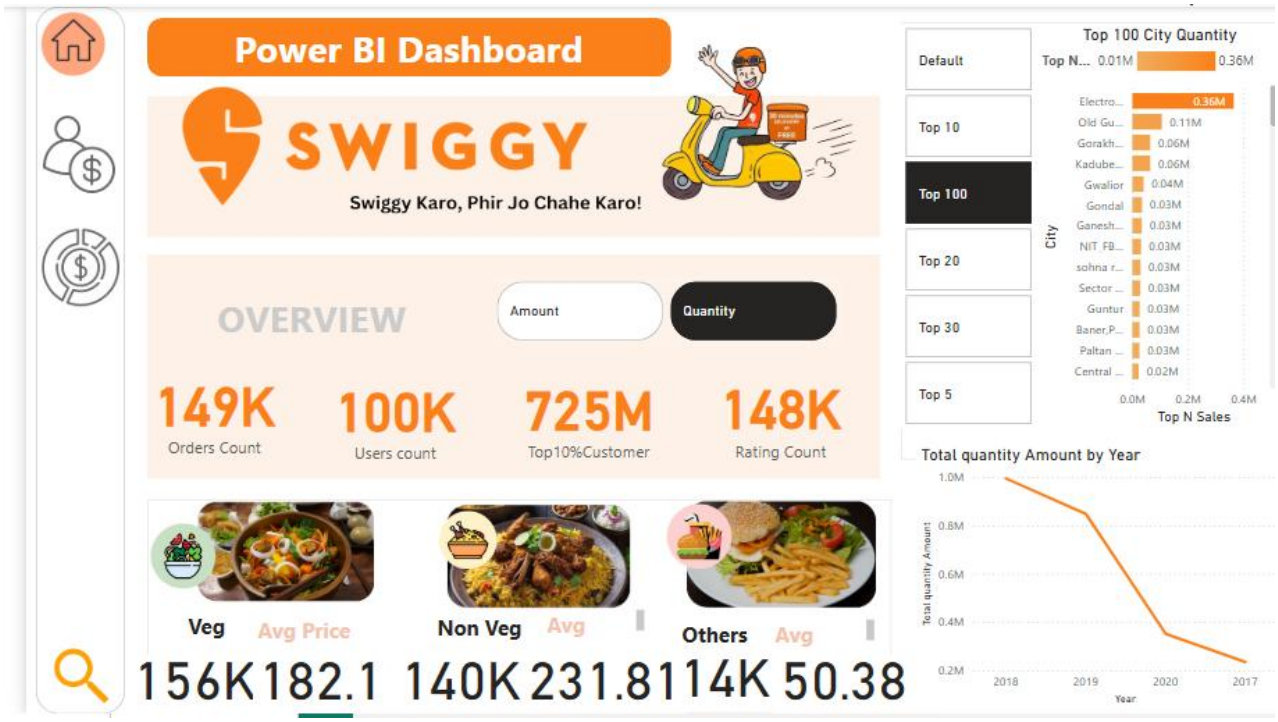
❖ AI-Powered Recommendations

- Implement AI models to suggest best-selling dishes and dynamic pricing strategies.

❖ Mobile-Friendly Dashboard

- Optimize the dashboard for mobile users to improve accessibility.

Output



Conclusion

The Swiggy Power BI Dashboard provides comprehensive insights into sales, users, and trends. It helps business stakeholders make informed decisions based on data analysis. Future enhancements can further improve usability and forecasting capabilities.

References

- Swiggy official data sources (mock data)
- Power BI documentation
- Data visualization best practices