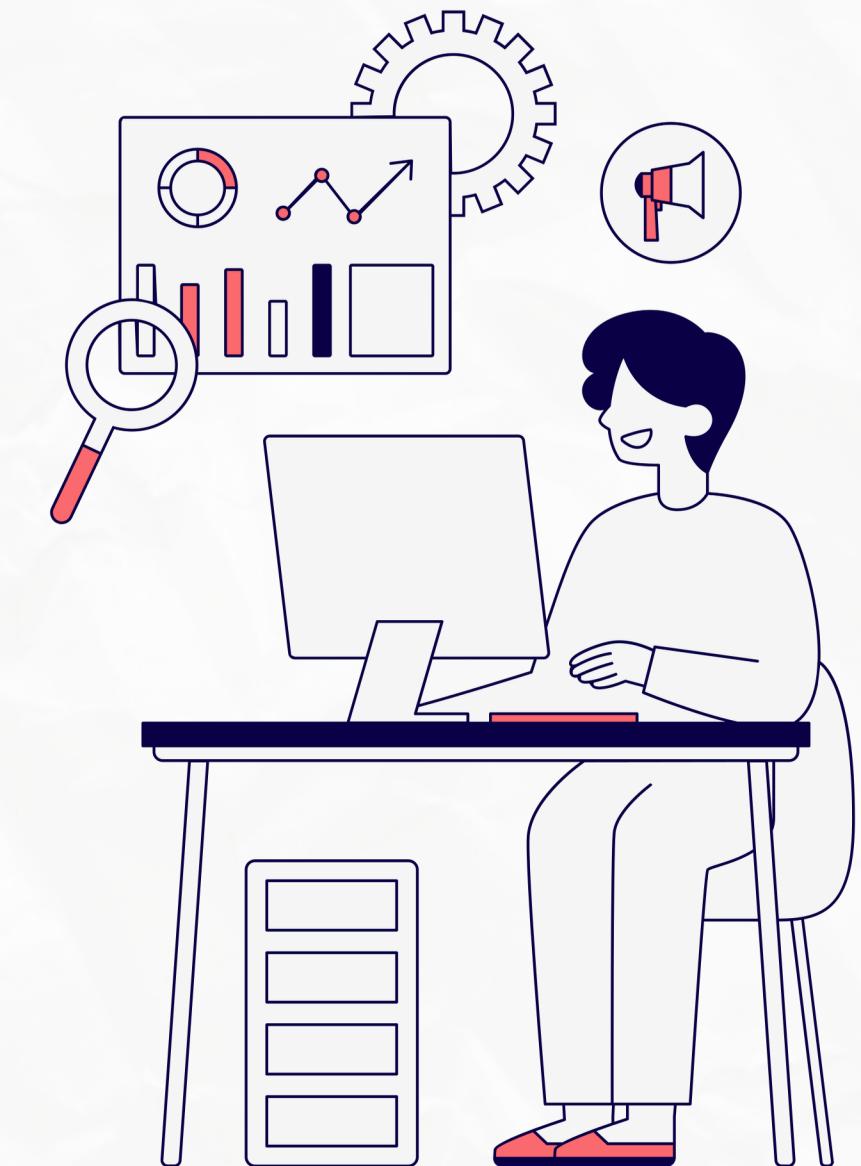


# FOODTRENDS: CUSTOMER PREFERENCE ANALYSIS USING POWER BI

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Date: October 2025

Group: C



# Problem Statement

## 1. The Idea

Food delivery platforms like Swiggy and Zomato aim to understand and anticipate customer behavior identifying what drives satisfaction, loyalty, and churn. By monitoring KPIs such as delivery time, food quality, offers, and user feedback in real time, they can personalize experiences, retain customers, and improve operational efficiency.

## 2. The Reality

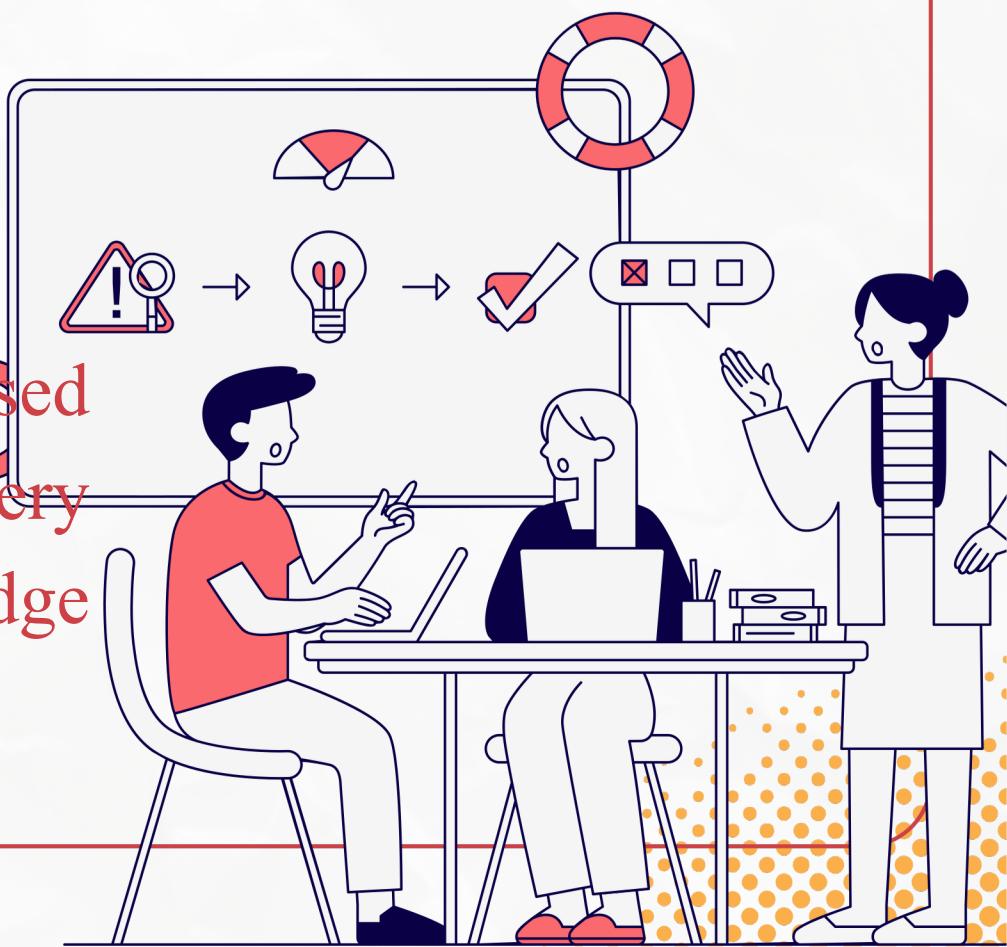
Despite collecting large volumes of customer data through orders and feedback, most food delivery companies:

- Rely on fragmented reports with limited visualization capability.
- Lack integrated dashboards to analyze satisfaction drivers or churn risks.
- Struggle to identify patterns in user preferences such as cuisine choice.
- Make decisions based on intuition rather than data-backed insights.

## 3. The Consequences

This results in:

- High churn rates (25–30%) due to unresolved customer dissatisfaction. 
- opportunities for targeted promotions and retention campaigns. Inefficient delivery
- operations caused by poor understanding of demand patterns. Loss of competitive edge
- in a highly saturated market where customer loyalty is fragile.



# Project Goals

- **Understand Customer Behavior:** Analyze demographics, ordering habits, and preference trends to identify the core consumer segments.
- **Measure Satisfaction Drivers:** Assess how delivery, food quality, offers, and service impact overall customer satisfaction.
- **Identify Churn Indicators:** Detect early signs of customer dissatisfaction or dropout by analyzing behavioral and service-related attributes.
- **Build Power BI Dashboards:** Create interactive dashboards to track KPIs and uncover trends in real time.
- **Deliver Actionable Insights:** Provide strategic recommendations for improving customer retention, optimizing delivery operations, and enhancing user experience.



# Dataset Overview



## Dataset Source

- Platform: Kaggle
- Dataset Name: Online Food Delivery Customer Churn Prediction
- Format: CSV (Imported into Power BI)

## Dataset Summary

- Total Records: 388 customer entries
- Total Features: 55 attributes
- Data Type: Mixed – includes numerical, categorical, and text data
- Key Columns: Age, Gender, Occupation, Income, Delivery Time, Satisfaction

Food Quality,

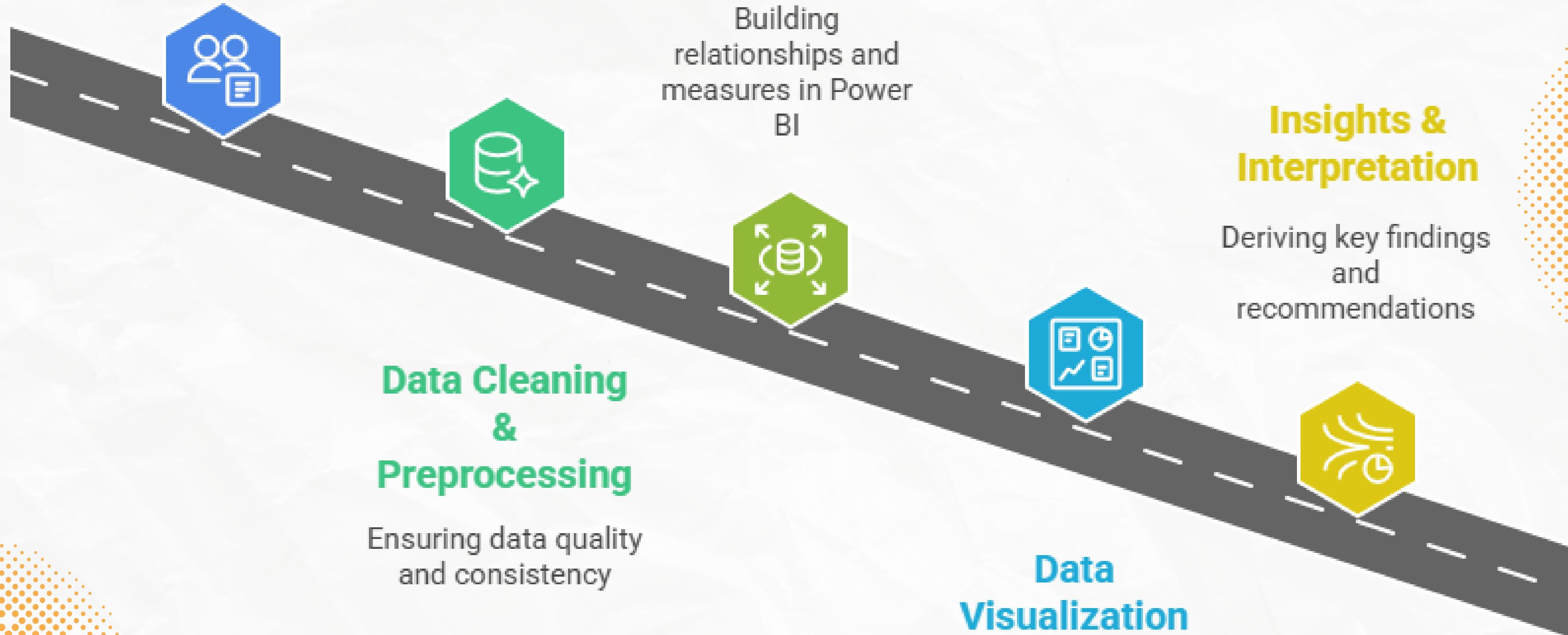
## Data Scope

The dataset covers:

- Customer Demographics (Age, Gender, Income) Service
- Experience (Delivery speed, Packaging, Politeness) Order
- Preferences (Meal type, Order time, Platform choice) Satisfaction
- & Churn indicators (Ratings, Feedback, Output flag)

# Methodology

Gathering data and  
Loading the Data



## Data Modeling

Building  
relationships and  
measures in Power  
BI

## Insights & Interpretation

Deriving key findings  
and  
recommendations

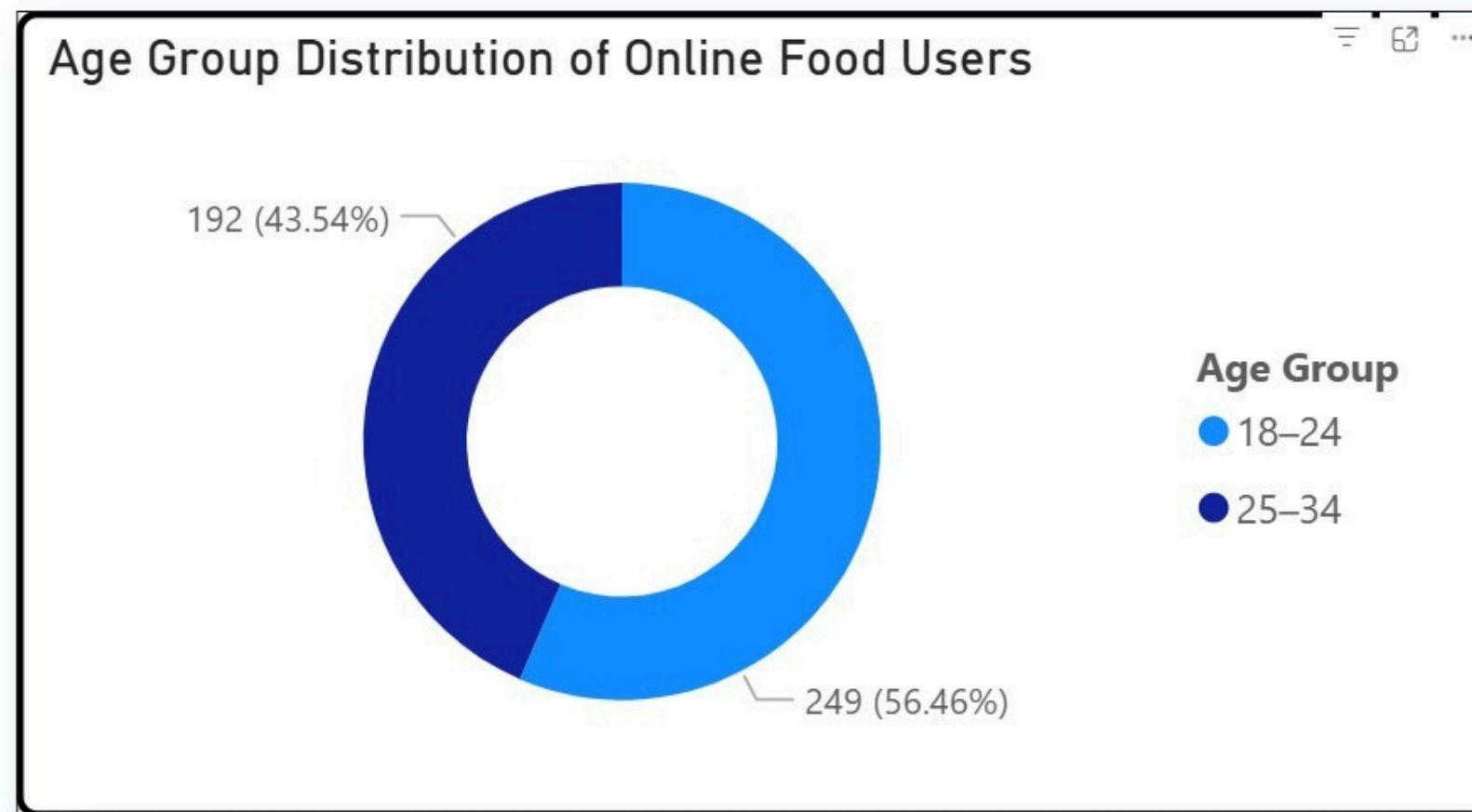
## Data Cleaning & Preprocessing

Ensuring data quality  
and consistency

## Data Visualization

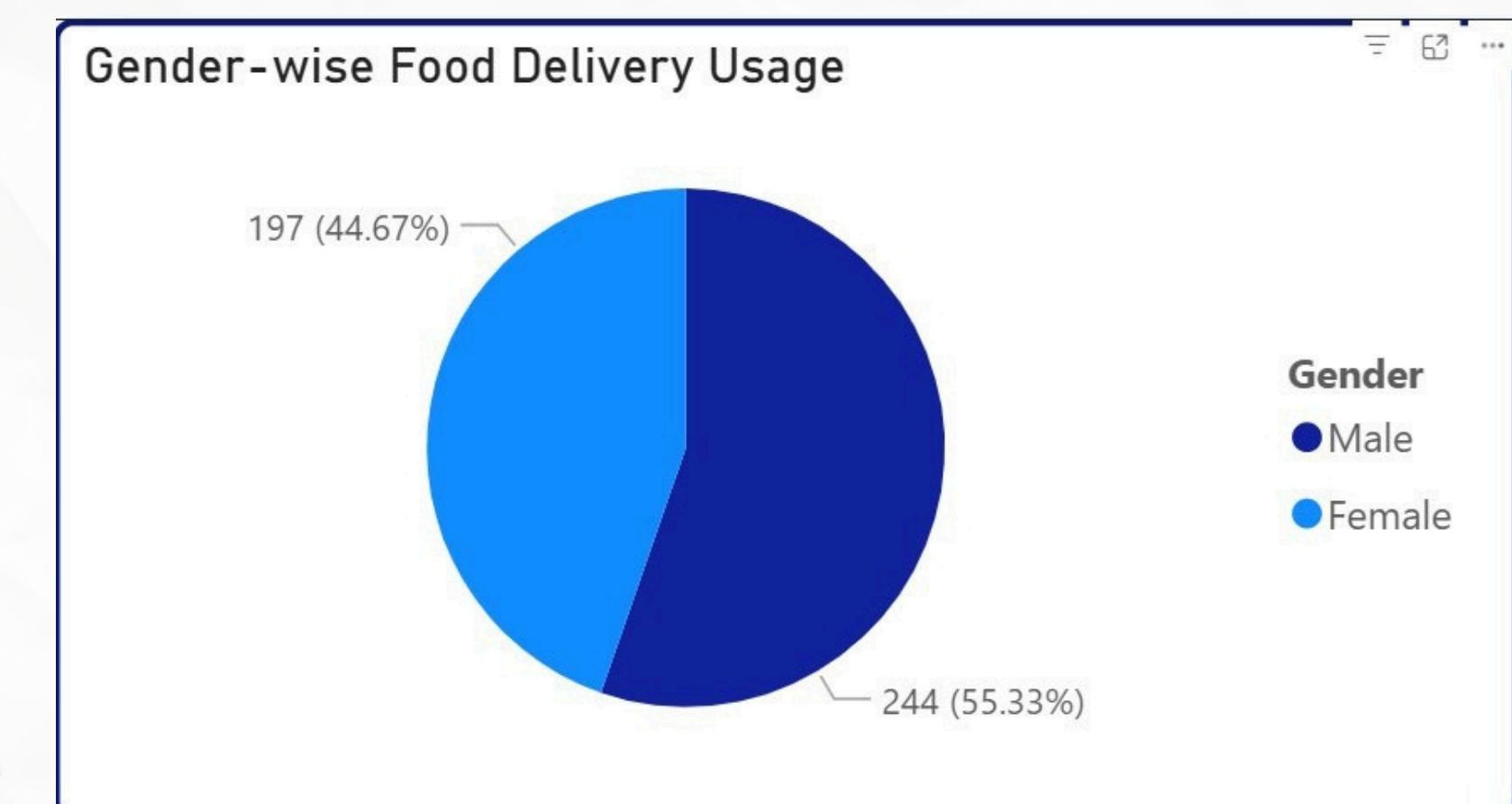
Creating interactive  
dashboards and  
charts

# Power BI Dashboard Insights



## AgeGroup Insight

Users aged 18-24 (56%) lead online food orders, followed by 25-34 (44%), indicating strong demand from young adults.



## Gender-wise Usage Insight

Males (55%) slightly outnumber Females (45%) in food delivery usage — showing a balanced.

# Power BI Dashboard Insights



- **Quality Food Score:** Indicating a gap in food quality expectations.
- **Satisfaction Score:** 3.69 — slightly below the desired level of 4.50.
- **Politeness Score:** A low average of 2.46 suggests room for improvement in customer interaction.
- **Delivery Efficiency:** Moderate performance at 3.07 on a comparable scale.

# Key Insights & Recommendations

## Insights:

- Majority of customers are aged between 20–35 years
- Fast delivery & polite staff drive satisfaction
- Delays & cold food cause churn
- 25–30% potential churn rate
- Professionals order more but dislike delays
- Students value consistent quality



## Recommendations:

- Improve delivery speed
- Quality control before dispatch
- Staff behavior training
- Personalized offers & loyalty programs
- Predictive churn prevention models



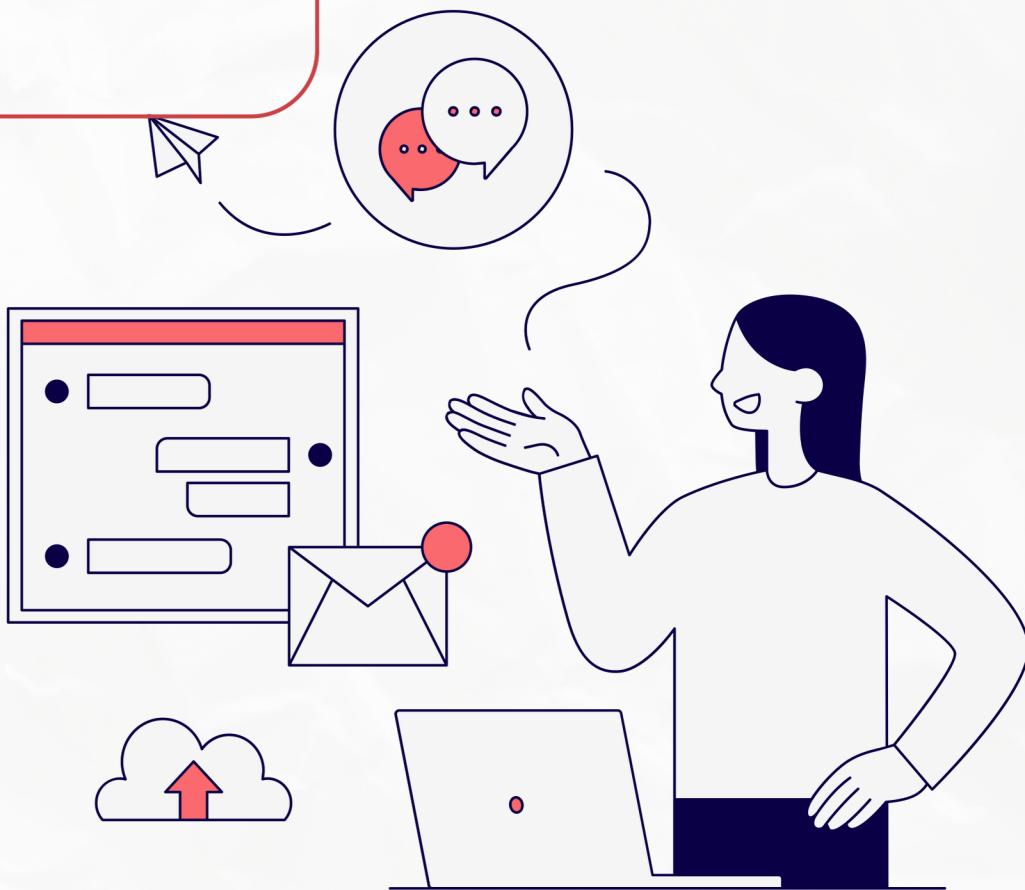
# Benefits of the Projects



- 1 Provides data-driven insights into customer preferences and satisfaction.
- 2 Helps identify key churn factors to improve customer retention.
- 3 Enables real-time decision-making through interactive Power BI dashboards.
- 4 Enhances operational efficiency in delivery and resource management.
- 5 Supports personalized marketing and targeted customer engagement.

# Future Scope

1. Integrate ML models for churn prediction and personalized recommendations.
2. Enable real-time data updates through live platform APIs.
3. Apply sentiment analysis on customer reviews for deeper insights.
4. Add geo-spatial mapping to visualize location-based performance.
5. Automate alerts and notifications for service quality drops.
6. Compare multiple platforms (e.g., Swiggy vs. Zomato) for benchmarking.



# Conclusion

## Project Summary

- This project, FoodTrends, used Power BI to analyze customer behavior and satisfaction within the online food delivery industry.
- By transforming raw survey data into interactive dashboards, we identified clear trends in customer preferences, service quality, and churn behavior.

## Key Outcomes

- Developed a data-driven understanding of customer demographics, ordering habits, and satisfaction levels.
- Identified key drivers of customer experience and churn
- Quantified performance through KPIs like satisfaction index and churn rate.
- Enabled real-time decision-making via interactive Power BI dashboards.

## Impact

- Helps food delivery businesses improve customer retention, optimize operations, and personalize marketing strategies.
- Demonstrates the value of data visualization in bridging the gap between customer feedback and actionable business intelligence.

# Thank You

