# Tech Saksham

Case Study Report

## Data Analytics with Power BI

# “360 Degree Business Analysis of Online delivery Apps”

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# ABSTRACT

In the dynamic landscape of the food delivery industry, understanding customer behavior, optimizing restaurant performance, and monitoring market trends are crucial for sustained success. This abstract outlines a comprehensive business analysis of Zomato's online delivery app using Power BI, providing a 360-degree view of its operations.

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# CHAPTER 1

# INTRODUCTION

## 1.1 Problem Statement

In the rapidly evolving online food delivery industry, Zomato faces the challenge of optimizing its online delivery platform to meet the dynamic needs and preferences of customers and restaurants while navigating competitive pressures. To address this challenge, there is a pressing need to conduct a comprehensive business analysis utilizing Power BI to gain insights into customer behavior, restaurant performance, market trends, and financial metrics

This problem statement encapsulates the need to harness data-driven insights to enhance Zomato's competitiveness, improve customer satisfaction, optimize restaurant partnerships, and achieve sustainable growth in the online food delivery market.Through this project, we aim to address this problem statement by leveraging Power BI's analytical capabilities to provide actionable insights for Zomato's stakeholders.

## 1.2 Proposed Solution

The proposed solution entails leveraging Power BI to conduct a comprehensive analysis of Zomato's online delivery platform, encompassing data collection, dashboard development, customer insights, restaurant performance analysis, market trends monitoring, financial analysis, and optionally, predictive modeling. By gatheringdata from various sources and visualizing key metrics through interactive dashboards,Zomato can gain actionable insights into customer behavior, restaurant performance, market dynamics, and financial metrics. This approach empowers Zomato to make data-driven decisions, enhance customer satisfaction, optimize restaurant partnerships, stay ahead of competitors, and achieve sustainable growth in the onlinefood delivery market, ultimately delivering superior value to its stakeholders.

## 1.3 Feature

1. **Interactive Dashboards:** Develop visually appealing and user-friendly dashboards using Power BI, allowing stakeholders to explore key metrics and KPIs related to customer behavior, restaurant performance, market trends, andfinancial analysis.

2. **Advanced Analytics:** Implement advanced analytics techniques, such as predictive modeling and sentiment analysis, to extract valuable insights from the data.
3. **Real-time Data Monitoring:** Enable real-time data monitoring and updates to ensure that stakeholders have access to the most current information.

## 1.4 Advantages

**1. Data-driven Decision Making:** By leveraging Power BI for analysis, businessescan make informed decisions based on comprehensive data insights.

**2. Actionable Insights:** Power BI's analytical capabilities enable businesses to derive actionable insights from large volumes of data.

**3. Efficiency and Scalability:** Power BI streamlines the process of data collection, cleaning, analysis, and visualization, making it more efficient and scalable for businesses of all sizes.

## 1.5 Scope

The scope of conducting a 360-degree business analysis of an online delivery app on Zomato using Power BI encompasses comprehensive data collection from various sources including transactional data, user feedback, and restaurant information, followed by thorough data cleaning, modeling, and visualization using Power BI's robust capabilities. The project aims to provide actionable insights for optimizing various aspects of the online delivery app, such as menu offerings, delivery logistics, pricing strategies, and customer targeting. By leveraging data-driven decision-making, the project seeks to enhance operational efficiency, improve customer satisfaction, and drive growth in the competitive online food delivery market.

# CHAPTER 3

# SERVICES AND TOOLS REQUIRED

## 2.1 Services Used

- **Data Collection and Storage Services**: Banks need to collect and store customer data in real-time. This could be achieved through services like AzureData Factory, Azure Event Hubs, or AWS Kinesis for real-time data collection,and Azure SQL Database or AWS RDS for data storage.
- **Data Processing Services**: Services like Azure Stream Analytics or AWS Kinesis Data Analytics can be used to process the real-time data.
- **Machine Learning Services**: Azure Machine Learning or AWS SageMakercan be used to build predictive models based on historical data.

## 2.2 Tools and Software used

**Tools**:

- **PowerBI**: The main tool for this project is PowerBI, which will be used to create interactive dashboards for real-time data visualization.
- **Power Query**: This is a data connection technology that enables you to discover, connect, combine, and refine data across a wide variety of sources.

**Software Requirements**:

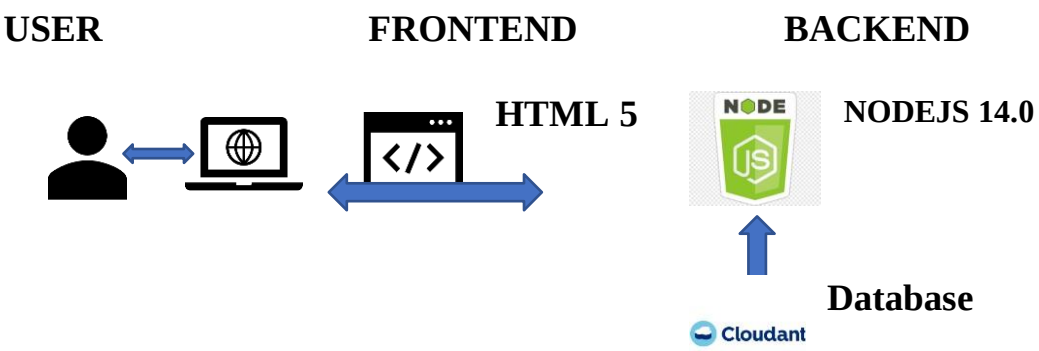
- **PowerBI Desktop**: This is a Windows application that you can use to create reports and publish them to PowerBI.
- **PowerBI Service**: This is an online SaaS (Software as a Service) service thatyou use to publish reports, create new dashboards, and share insights.
- **PowerBI Mobile**: This is a mobile application that you can use to access your reports and dashboards on the go.

# CHAPTER 4

# PROJECT ARCHITECTURE

## 3.1 Architecture




Here's a high-level architecture for the project:

1. **Data Collection**: Real-time customer data is collected from various sources likebank transactions, customer interactions, etc. This could be achieved using services like Azure Event Hubs or AWS Kinesis.
2. **Data Storage**: The collected data is stored in a database for processing. AzureSQL Database or AWS RDS can be used for this purpose.
3. **Data Processing**: The stored data is processed in real-time using services likeAzure Stream Analytics or AWS Kinesis Data Analytics.
4. **Machine Learning**: Predictive models are built based on processed data usingAzure Machine Learning or AWS SageMaker. These models can help in predicting customer behavior, detecting fraud, etc.
5. **Data Visualization**: The processed data and the results from the predictive models are visualized in real-time using PowerBI. PowerBI allows you to createinteractive dashboards that can provide valuable insights into the data.
6. **Data Access**: The dashboards created in PowerBI can be accessed through PowerBI Desktop, PowerBI Service (online), and PowerBI Mobile.

This architecture provides a comprehensive solution for real-time analysis of bank customers. However, it's important to note that the specific architecture may vary depending on the bank's existing infrastructure, specific requirements, and budget. It'salso important to ensure that all tools and services comply with relevant data privacy and security regulations.

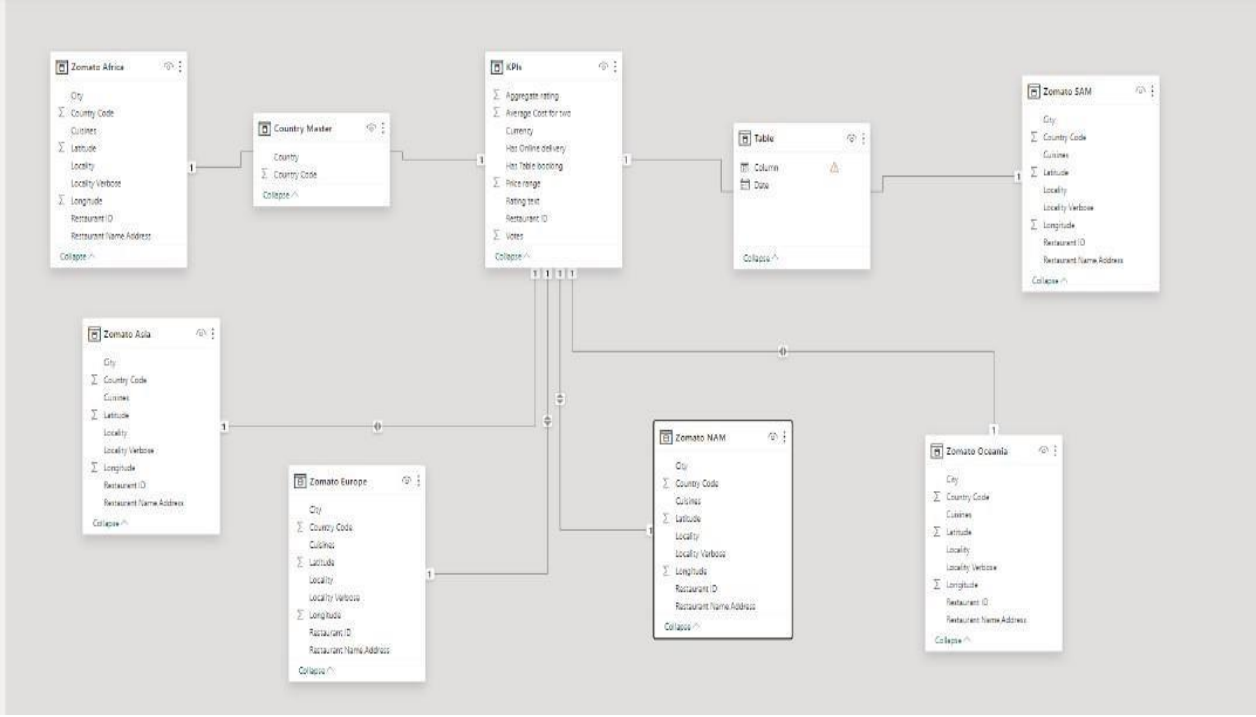
 

# CHAPTER 4

# MODELING AND RESULT

## Manage relationship

The “disp” file will be used as the main connector as it contains most key identifier (account id, client id and disp id) which can be use to relates the 8 data files together. The “district” file is use to link the client profile geographically with “district id”



# Dashboard

# CONCLUSION

In conclusion, conducting a 360-degree business analysis of an online delivery app on Zomato using Power BI offers a strategic approach to optimizing operations and driving growth in the competitive food delivery market. Through comprehensive data collection, cleaning, modeling, and visualization, the project enables businesses to make informed decisions based on actionable insights. By leveraging Power BI's analytical capabilities, businesses can identify trends, patterns, and key performance indicators to optimize menu offerings, delivery logistics, pricing strategies, and customer targeting. The iterative nature of the analysis ensures continuous improvement and adaptation to changing market dynamics, ultimately leading to enhanced operational efficiency, improved customer satisfaction, and sustained growth. Overall, the project empowers businesses to stay ahead of the competition and thrive in the dynamic landscape of online food delivery.

# FUTURE SCOPE

Looking ahead, the future scope of this project entails embracing emerging technologies and innovative strategies to further enhance the analysis of online delivery apps on platforms like Zomato using Power BI. One avenue for future development involves leveraging advanced predictive analytics and machine learning algorithms to forecast demand patterns, optimize delivery logistics, and personalize user experiences. Additionally, integrating Internet of Things (IoT) devices for real-time data collection and feedback mechanisms can enable proactive management of operations and enhance customer satisfaction. Furthermore, expanding the analysis to encompass multiple platforms and incorporating external data sources such as weather data and social media trends can provide a more holistic view of the market landscape and inform strategic decision-making. Moreover, focusing on enhancing visualization techniques and user interface design can improve the accessibility and usability of insights for stakeholders. As online food delivery continues to evolve globally, there is also potential for localization efforts to cater to diverse geographic regions and cultural preferences. Overall, the future scope of this project is characterized by continuous innovation, adaptation to changing market dynamics, and a commitment to driving growth and competitiveness in the online food delivery industry.

# REFERENCES

**LINk**