

# **Capstone Project -1**

## **Power BI Dashboarding project proposal**

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## **1. Executive Summary:**

This project aims to develop interactive and insightful dashboards using Power BI for Zomato Analysis to enhance data-driven decision-making. The dashboards will focus on key performance indicators, providing a visual representation of critical business metrics.

## **2. Problem Statement:**

**Objective:** In this project, we investigate a dataset that carries approximate facts about restaurant chains all over the world. The project's main aim is to perform descriptive and statistical analysis based on a few goals designed.

**Scope:** The scope of the project proposal involves investigating a dataset containing information about restaurant chains globally. Moreover, the project aims to develop interactive dashboards using Power BI for Zomato analysis, focusing on key performance indicators and providing visual representations of critical business metrics.

## **Data Sources:**

**Primary Data:** The dataset provides information like an average cost for two, location, votes, the aggregate rating, cuisines, rating text, etc.

**Secondary Data:** In addition to the primary dataset, external data sources will be explored to incorporate market trends and demographic information. These additional data sources will enhance the depth of analysis and provide a broader context for decision-making within the restaurant industry.

## **3. Methodology:**

**Data Integration:**

The primary aspect of the methodology involves extracting and integrating data from various sources into Power BI. This entails consolidating the primary dataset containing information

about restaurant chains worldwide and potentially combining it with relevant secondary data sources to provide a comprehensive analysis.

#### Dashboard Design:

The project will focus on creating a visually compelling and informative dashboard for Zomato data. This involves the design and development of visualizations that effectively communicate key insights and trends to stakeholders.

#### Interactivity:

Interactive features for drill-down analysis and trend exploration will be implemented within the dashboard. This adds an element of interactivity, allowing users to delve deeper into the data and gain more nuanced understanding of the insights presented.

### **4. Expected Outcomes:**

\* The project aims to deliver actionable insights, drive business growth, and enhance the overall dining experience for users and restaurant owners through the development of interactive and insightful dashboards using Power BI for Zomato analysis.

\*By visualizing key performance indicators and critical business metrics, the project intends to improve decision-making processes within the restaurant industry.

\*Enhanced data accessibility and collaboration among teams are anticipated outcomes, facilitating a more streamlined and informed approach to data analysis and interpretation.

### **5. Tools and Technologies:**

Power BI: As the primary tool for dashboard development and visualization, Power BI will be instrumental in creating interactive and insightful representations of the Zomato data.

Excel: These tools will likely be used for data extraction, transformation, and mapping, ensuring that the data is formatted and structured appropriately for analysis and visualization in Power BI.

Python: Python may be utilized for data mapping and potentially for additional data cleaning or transformation tasks, leveraging libraries such as NumPy and Pandas for advanced data manipulation.

These tools and techniques showcase a comprehensive approach to data analysis, visualization, and dashboard development, aligning with the project's objective of generating actionable insights and providing a visual representation of key metrics.

## **7. Risks and Challenges:**

\*Integration Challenges: Challenges may arise while integrating diverse data sources into the project. Ensuring seamless integration without compromising data accuracy and consistency is a critical concern.

\*Data Accuracy and Consistency: Maintaining data accuracy and consistency across dashboards is crucial for providing reliable and insightful information. Any discrepancies could undermine the credibility of the insights derived from the analysis.

\*User Adoption and Training: The proposal acknowledges potential challenges related to user adoption and training, particularly for stakeholders unfamiliar with Power BI. Overcoming this hurdle is essential to ensure that stakeholders can effectively leverage the insights generated by the project.

By proactively addressing these risks and challenges, the project can strategically mitigate potential issues and ensure the successful implementation of the Zomato analysis using Power BI.

## **8. Conclusion:**

In conclusion, the project proposal aims to leverage the Zomato dataset to develop interactive and insightful dashboards using Power BI for comprehensive analysis within the restaurant industry. The project is designed to provide actionable insights, enhance decision-making processes, and improve the overall dining experience for users and restaurant owners. By addressing primary and secondary data sources and adopting a robust methodology for data

integration, dashboard design, and interactivity, the project seeks to deliver valuable insights and drive business growth. While acknowledging potential risks and challenges, the project proposal displays a proactive approach to ensuring data accuracy, user adoption, and successful integration of diverse data sources. Through this initiative, stakeholders in the restaurant industry can gain meaningful insights to drive business growth, improve the dining experience, and enhance customer satisfaction.