

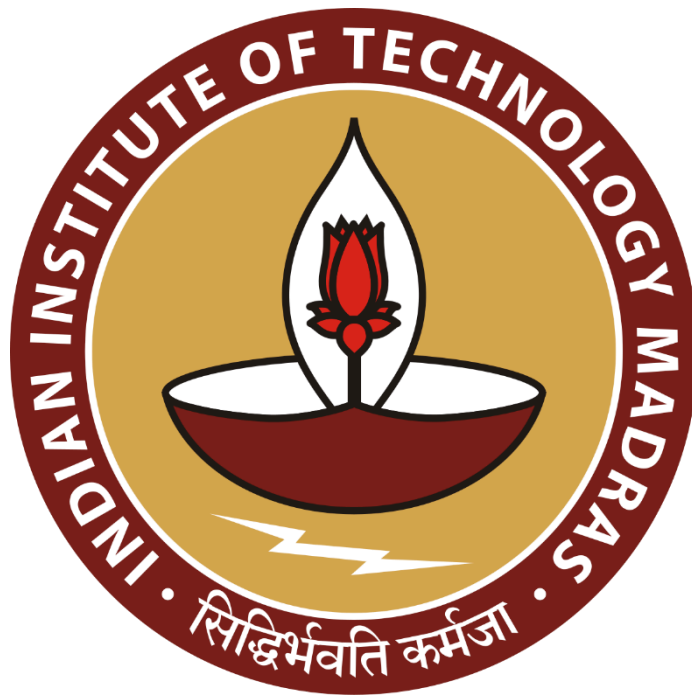
# **Boosting Cafe Revenue: A Data-Driven Approach to Uncover Sales Bottlenecks and Retain Customers**

**A Proposal report for the BDM capstone Project**

Submitted by

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### **Declaration Statement**

I am working on a Project titled **“Boosting Cafe Revenue: A Data-Driven Approach to Uncover Sales Bottlenecks and Retain Customers”**. I extend my appreciation to **The Young Mug** , for providing the necessary resources that enabled me to conduct my project.

I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analysed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the principles of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project's completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfilment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.



Name: MD IRSHAD ANWAR

Date: 1/11/2024

## **Contents**

<b>1 Executive Summary</b>	<b>3</b>
<b>2 Organisation Background</b>	<b>3</b>
<b>3 Problem Statement</b>	<b>4</b>
<b>4 Background of the Problem</b>	<b>4</b>
<b>5 Problem Solving Approach</b>	<b>5</b>
<b>6 Expected Timeline</b>	<b>6</b>
<b>7 Expected Outcome</b>	<b>7</b>

## **1 Executive Summary**

The Young Mug, a quick-service restaurant (QSR) located in Beadon Street, Kolkata, is known for its diverse range of fast food and beverages. It specializes in customer favorites such as veg momos, paneer momos, corn pizza, and cheese pizza. Despite its strong reputation and strategic location, The Young Mug is currently facing significant challenges that impact its profitability and growth. These challenges include slower sales growth, issues with customer retention, and inefficiencies in inventory management, resulting in increased operational costs and food wastage. The analysis will help identify high-demand and low-performing menu items, assess customer satisfaction levels, and optimize inventory management.

The insights derived from this analysis will enable The Young Mug to align its offerings with customer preferences, thereby improving customer retention. Optimizing inventory based on demand patterns, the restaurant can significantly reduce waste and lower holding costs. The anticipated outcomes of this project include a potential 15–20% increase in sales and a 40–50% reduction in inventory costs. This report details the analysis process, findings, and actionable recommendations aimed at transforming The Young Mug's challenges into opportunities for growth and profitability.

## **2 Organisation Background**

The business that I have selected is The Young Mug, which is a B2C fast food store based in Kolkata. The owner of the firm is Ankit Singh, who started this fast-food business on July 18, 2015. Vision of the firm: "The Young Mug focus is on offering quality and healthy products, good customer service, and ensuring customer satisfaction." Their popular food items are coffee, egg rolls, butter chicken and kebabs, Chicken Cheese Burger, chole bhature, biryani, and rolls. Ankit Singh is the sole owner of this restaurant, and there are 3 people working in this firm right now. The Young Mug also accepts pre-bookings for special events like birthdays and parties.

They crossed around 1,500.00 in sales and earned a profit of 40,000 in the last financial year. For the convenience of their customers, they accept both UPI and cash as a mode of payment. After talking to the owner of the restaurant and his team, I discovered that before the introduction of the online food ordering and delivery company Zomato, Swiggy, and so on, the business was doing reasonably well and that sales and profit margins have collapsed since.

### **3 Problem Statement**

- 3.1 The customers' feedback plays an important role in future planning and development of the business. The fundamental goal is to analyse the feedback to increase the customer satisfaction by finding bottlenecks and increasing the revenue by increasing the number of customers and repeat customers
- 3.2 Inefficient inventory management has led to high operational costs and food wastage. The aim is to optimise the stock by analysing data, thus decreasing inventory costs up to 50% through the proper control of fast and slow-moving items.
- 3.3 The emergence of big fast food chain companies has led to the slow growth of cafes and restaurants. The objective is to find the bottlenecks that hinder the growth and provide ways to resolve them to enhance the sales.

### **4 Background of the Problem**

The Young Mug has become a popular fast-food destination, specifically catering towards the local college crowd and the office-goers. The restaurant hasn't managed to unfold into a regular growth story but it's been really hard for the restaurant with the sudden growth of the online food delivery giants like Zomato and Swiggy. These platforms have set a new standard of convenience, selection, and price, pushing sizable businesses beyond the competition bar while ironically small businesses like The Young Mug can hardly compete.

The other troubles troubling the restaurant are attracting and maintaining a strong customer following and keeping their menu items fresh and current. The growth rate of sales is slower than expected, the range of offered products is not so competitive now, and some of them are even outdated or now in demand seasonally. With the rise of high competition in the market, the rating and customer satisfaction are low as compared to its competitors. This results in lower return customers and thus less revenue for the business. I myself visited their store and tried to identify the problems that the customers might be experiencing.

## **5 Problem Solving Approach**

Understanding the problem is the first step for a structured, data-driven approach. Based on the problem encountered and explained by the firm, I will apply skills and knowledge in data analysis to generate insights to improve customer satisfaction, increase sales, and improve strategies to retain customers and overall efficiency of the firm.

**Data Collection :** For this, we need to focus mainly on two important parts of the data set that are collected from the restaurant sales and inventory data. I will be looking at sales records to learn about key areas like customer buying behaviour, and favourite food items. This way, it will be easy to know what appeals to customers and leads to sales.

**Data Analysis :** In this process, I will analyse the sales data to know more about hot selling items in the menu and performance of other items using Excel by using the intense power of pivot tables, I will plot pie charts, and stack histograms to find insights and visual clarity from the data. This approach will identify hot stocks for frequently selling food items and will be restocked to improve service workflow for the restaurant. By utilising Excel for data collection, analysis, and tracking

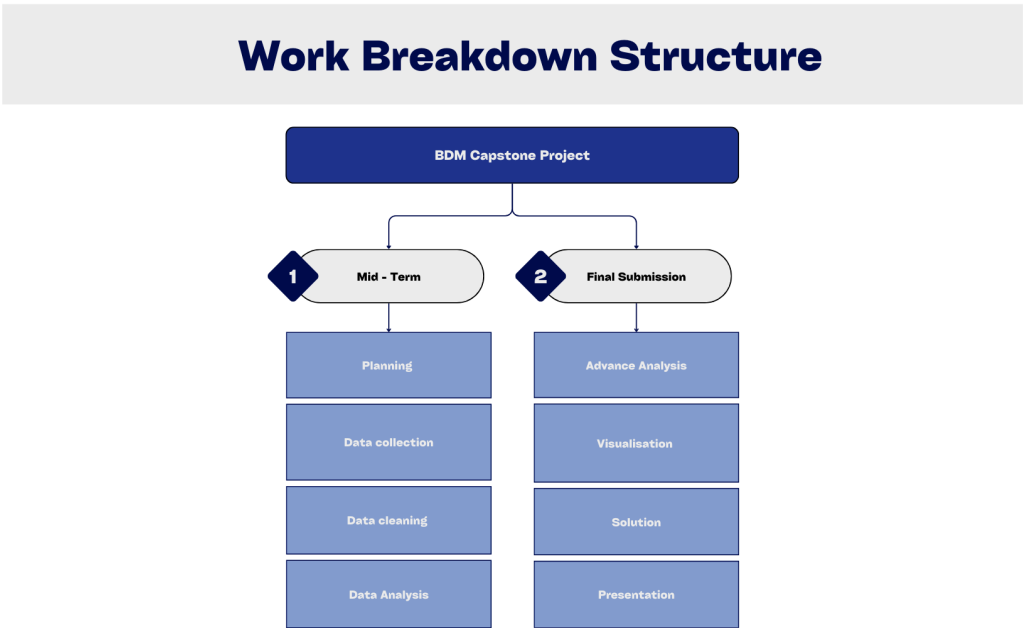
The four components of a SWOT analysis are separated into internal and external sources. While opportunities and dangers are external elements, strengths and weaknesses are internal factors. This approach aids in determining which areas require improvement in order to meet corporate objectives.

I will analyse inventory data to discover patterns in stock movement through the use of conditional formatting and pivot tables. To avoid having too much inventory, we will identify and label items that are not selling quickly, while popular items will be labelled for regular restocking. Developing an Excel inventory monitor that keeps track of inventory levels and detects approaching expiry dates can enhance inventory cost management. The Young Mug will gain valuable insights to improve customer satisfaction, optimise inventory, and increase sales. By reducing waste, this method will help decrease expenses associated with inventory.

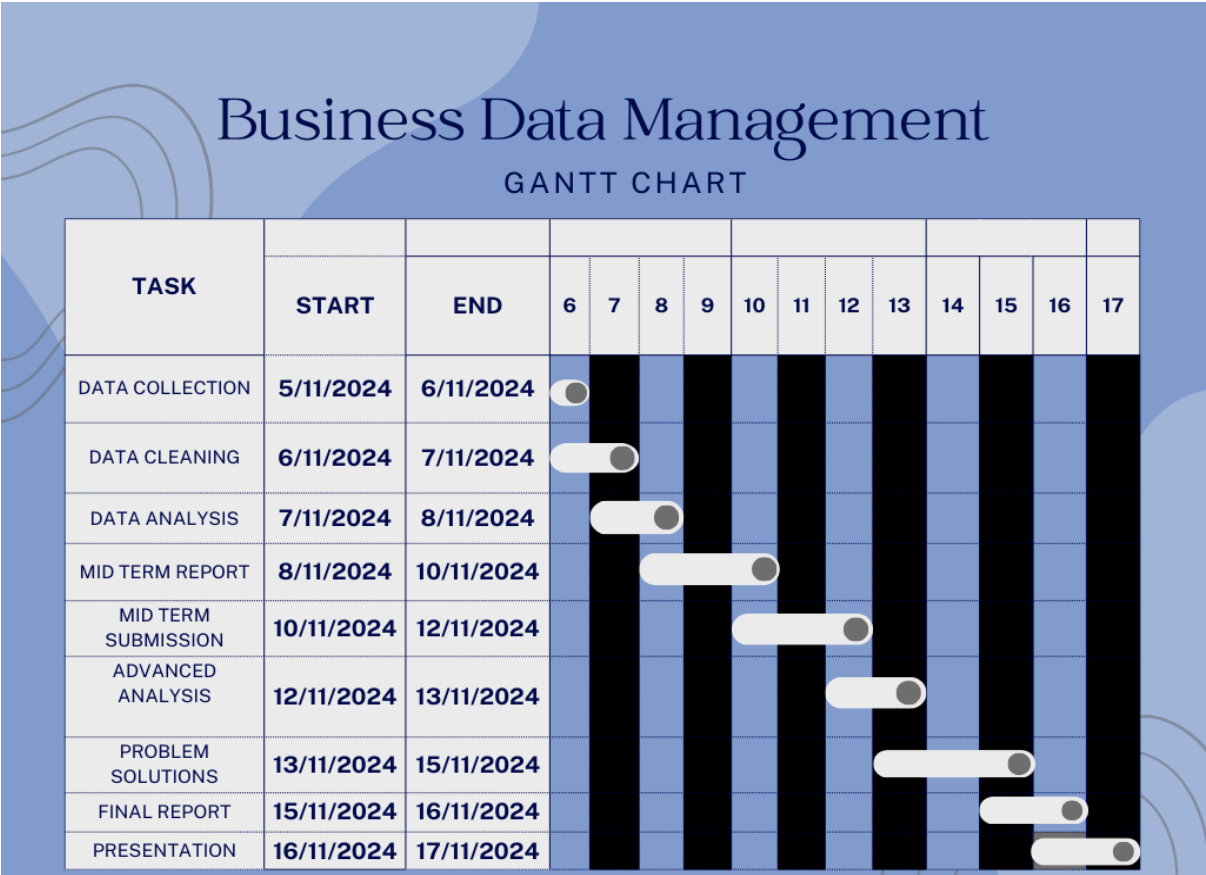
Eventually, this problem-solving approach helps us to integrate data analysis with strategic marketing and inventory management enhancements to improve The Young Mug's business standings and strategies.

6 Expected Timeline

6.1 Work Breakdown Structure:



6.2 Gantt chart:



## **7 Expected Outcome**

The project should deliver multiple important outcomes that will improve the performance of the The Young Mug continuum. The first is that of improved inventory management, which will enable the owner to see popular food items and maintain optimal stock levels, thus reducing waste by 40-50% and improving profitability.

In addition to a more well-rounded product portfolio aimed at solving The Young Mug's needs, aligning the menu to be more in line with what customers want to eat will replace seasonal and old menu items with sought-after offerings that will cater to a wider audience and increase customer satisfaction.

The data analysis techniques used in this project will serve The Young Mug with a consistent methodology for future decision making and performance monitoring.

This access to instant sales and customer insights will enable the business to make informed decisions around future promotions, product range and operational changes; driving sustainable growth in a competitive environment.

In the end, these results will allow The Young Mug to maximise a complete business plan, which will strengthen customer experience and retention but also revenue, making it more competitive at an industry level.