Operational Case Study of Food Plaza Restaurant
A Proposal report for the BDM capstone Project

Submitted by:

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Declaration Statement

I am working on a Project Title “Financial and Operational Case Study of Food Plaza Restaurant”. I extend my appreciation to Food Plaza, 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 through primary sources and carefully analyzed 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 information 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 agree that all the recommendations are business-specific and limited to this project exclusively, and cannot be utilized for any other purpose with an IIT Madras tag. I understand that IIT Madras does not endorse this.

Signature of Candidate: (Digital Signature)
Name: Shreeya Baral
Date: July 2, 2024

Executive Summary

Food Plaza Restaurant, established in 2016 in Vasundhara Enclave, East Delhi, is a small-sized dining establishment serving a variety of traditional Indian and Chinese cuisines. The restaurant struggles with an extensive menu that complicates operations, a lackluster online presence, and inconsistent customer turnout on certain days.

This project aims to address these issues through a comprehensive analysis of the restaurant's operations and customer preferences. Data was collected over a three-month period. The collected variables include cost price, selling price, and units sold. Additional data on labor costs, fixed costs, and customer feedback were also gathered.

The problem-solving approach involves several key methods:

1. Menu Optimization: Utilizing pivot tables and Excel functions to analyze sales data and identify high-performing and low-performing menu items. This analysis will guide the streamlining of the menu to focus on profitable and popular dishes.
2. Enhancing Online Presence: Developing a content strategy and engaging with customers on social media to increase brand visibility and customer engagement.
3. Boosting Sales on Low Days: Implementing targeted promotions and themed events to attract customers on slow days and increase sales consistency.

Data analysis tools such as MS Excel pivot tables, VLOOKUP(), COUNTIF(), COUNTIFS(), and boolean operators are used to process and analyse the data. Visualisation tools, including pie charts, stacked histograms, scatter plots etc to present the findings clearly and effectively.

By leveraging these methods and tools, the project aims to provide actionable insights that will enhance operational efficiency, improve customer satisfaction, and drive consistent revenue growth for Food Plaza Restaurant.

Organisation Background

Food Plaza, established in 2016 owned by Mr. Prakash Chandra Tiwari, is a vibrant dining establishment located at Shop No. 5, DDA Market, Vasundhara Enclave, Delhi. Over the years, the establishment has become a beloved local spot, known for its diverse menu featuring North Indian and Chinese cuisines. With a dedicated team of 10 employees, the restaurant strives to provide a warm and welcoming atmosphere for its patrons.

Under Mr. Tiwari's leadership, Food Plaza has consistently prioritized customer satisfaction, leading to a loyal customer base and positive word-of-mouth. The restaurant’s annual turnover of 18 lakhs reflects its steady growth. Despite facing challenges in recent past, particularly with the integration of online marketing systems, Food Plaza continues to evolve and reinvent itself. In the recent time, there are mushrooming of small food joints along with few reputed food joints such as Domino’s, Pizza Hut, Banana leaves in the neighborhood region.

Problem Statement

Statement 1: The restaurant has many menu items, which needs to be optimised by prioritising menu items which generate more profit.
Statement 2: The restaurant's online presence lacks engagement.
Statement 3: The restaurant experiences low sales on certain days, indicating a need for strategies to boost customer turnout and sales consistency.

Background of the Problem

Problem Statement 1: The restaurant has many menu items, which needs to be optimised by prioritizing menu items that generate more profit.

The establishment has an extensive menu that offers a wide variety of North Indian and Chinese dishes. While this diversity aims to cater to a broad range of tastes and preferences, it has led to several operational challenges. A large menu complicates inventory management, increases waste, and slows down service efficiency. Moreover, not all menu items contribute equally to profitability. Some dishes incur higher costs due to expensive ingredients or longer preparation times, while some are not popular enough. This necessitates a strategic reduction of menu items, focusing on those that generate higher profits and are preferred by customers. Prioritising profitable and popular dishes can streamline operations, improve customer satisfaction, and enhance overall profitability.

Problem Statement 2: The restaurant's online presence lacks engagement.

In today's digital age, a robust online presence is crucial for any business, including restaurants. The establishment has established an online presence, but it lacks sufficient engagement. Without an engaging online presence, the restaurant misses out on opportunities to reach a wider audience, build a loyal customer base, and drive more traffic to the restaurant.

Problem Statement 3: The restaurant experiences low sales on certain days, indicating a need for strategies to boost customer turnout and sales consistency.

Sales fluctuations are common in the restaurant industry. For this restaurant, certain days experience significantly lower foot traffic and sales. This inconsistency can be due to various factors, such as lack of promotions, ineffective marketing strategies, or external factors like local events and holidays. To mitigate this, the restaurant needs to develop targeted strategies to attract customers on slow days. Being a regular customer, I have never seen them do any kind of promotional event or have a customer loyalty program.

Problem Solving Approach

Details about the intended data collection with justification

Time Series Data Collection: The primary data collected is time series data, which includes daily sales figures, inventory levels, and number of customer orders over three months. This data set is crucial for identifying trends.

Although there are several dishes sold by the business, my analysis focused on 15 food items, to make the process of data collection as well as analysis conclusive. The various variables that have been collected for the above products are: Cost price, Selling price & Units sold/number of customer orders. The idea is to collect customer feedback for these dishes.

Data Analysis and Visualization:

- Pivot Tables: MS Excel pivot tables have been used to organize and summarize data efficiently. This tool allows for filtering making it easier to identify high-performing and low-performing menu items.
- Excel Functions: Utilizing functions such as VLOOKUP(), COUNTIF(), COUNTIFS() and boolean operators to analyze data. These functions help in cleaning, sorting, and extracting meaningful insights from the data collected.
- Financial Ratios Calculation: Calculating key financial metrics such as Revenue, Expenditure, Gross Profit, Net Profit, Profit Margin, ROCE (Return on Capital Employed), Gross Profit Ratio, and Net Profit Ratio. Financial ratios provide a clear picture of the restaurant's profitability and operational efficiency.
- For data visualisation, I will be primarily using: Pie charts, Stacked Histograms, Histograms, Scatter plots, Heat maps, etc.

Problem Solving Approach:

1. Menu Optimization:
    - Data Analysis: Utilize data to identify high-performing and low-performing menu items. Retain profitable and popular dishes while removing or modifying less successful ones. Streamlining the menu will enhance operational efficiency, reduce waste, and increase profitability.
2. Boosting Sales on Low Days:
    - Derive meaningful insights from data collected, try implementing a solution to increase sales on days when they are seen to be low.

Expected Timeline

I have successfully collected 3 month's worth of data which will be first cleaned, analysed according to which more data will be collected if needed.

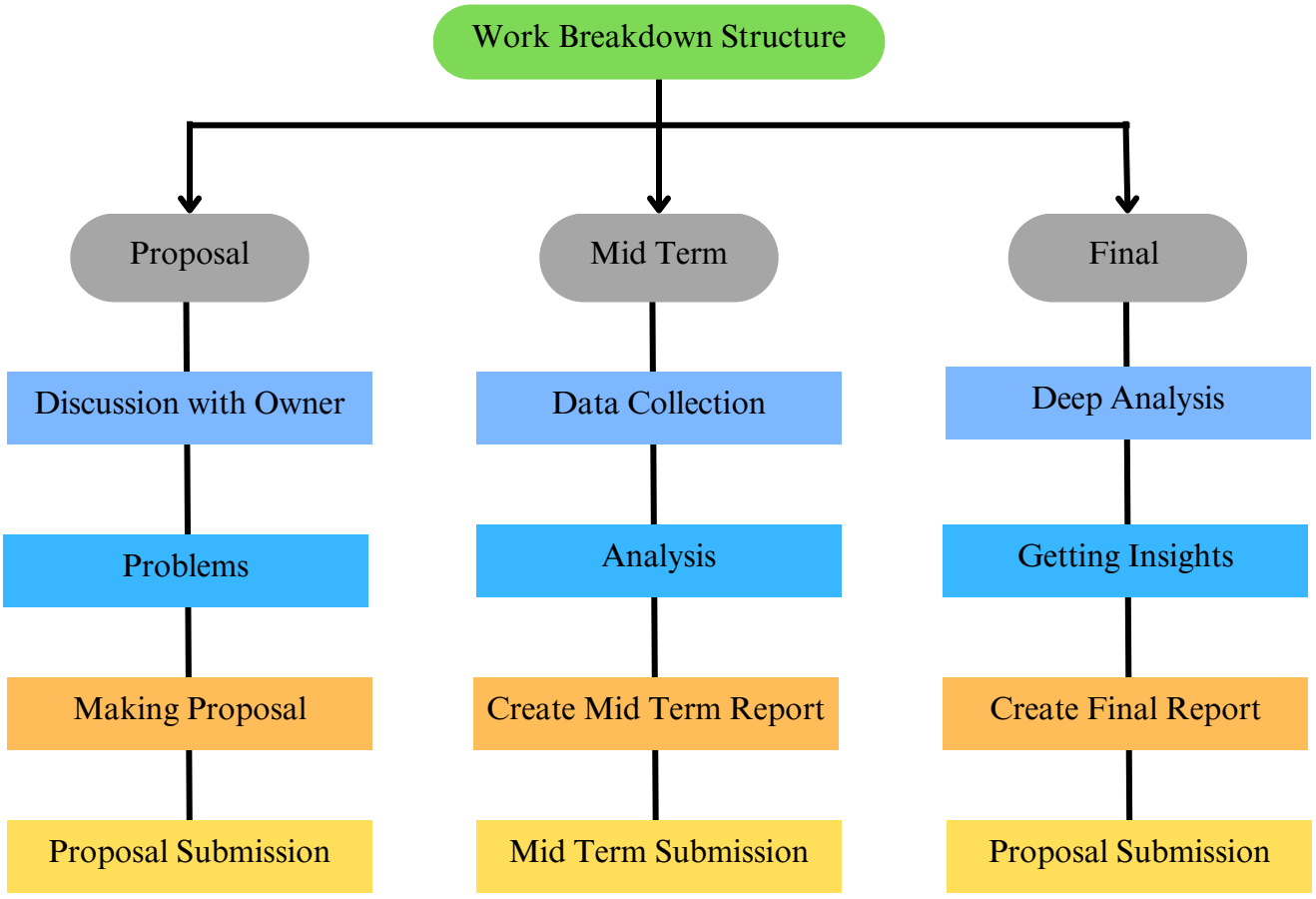

Figure 1: Work structure Breakdown

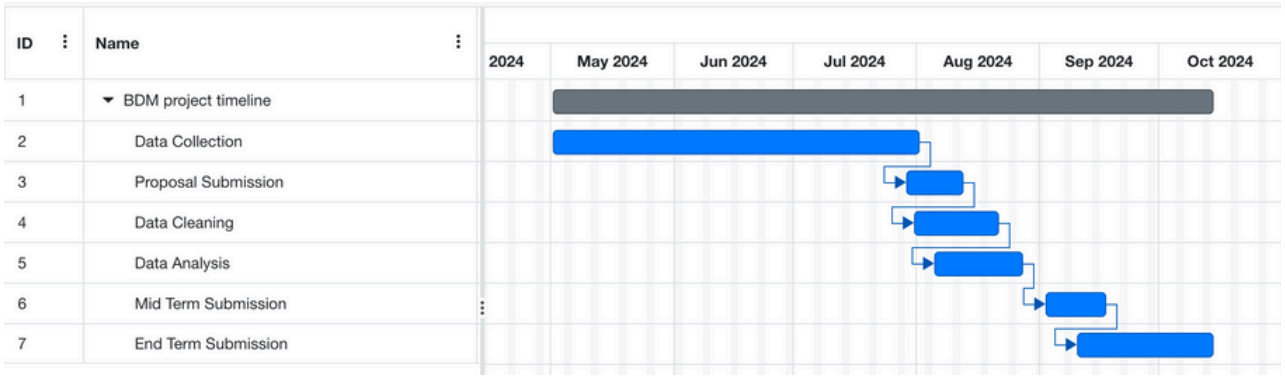

Figure 2: Gantt Chart

Expected Outcomes

The expected outcomes of this project are designed to significantly improve growth and efficiency. By addressing the three key objectives, the restaurant aims to enhance its operational processes, customer engagement, and sales consistency.

1. Menu Optimization:
    - By analyzing sales data and streamlining the menu to focus on high-performing and profitable items, the restaurant will achieve increased efficiency in kitchen operations, reduced waste, and improved profitability.
    - This will also lead to a better dining experience for customers, as the menu will highlight the most popular and well-loved dishes.
2. Enhancing Online Presence:
    - With an enhanced and engaging online presence, the restaurant will attract a larger audience, increase customer loyalty, and improve brand visibility.
    - This will be achieved through a customer loyalty program and having themed events as well as having offers on holidays.
    - As a result, the restaurant will see a rise in online orders contributing to overall sales growth.
3. Boosting Sales on Low Days:
    - Targeted promotions, themed events, and local collaborations will increase foot falls and sales on slow days, ensuring consistent revenue and optimising resource utilisation.

<u>Limitations</u>

1. Customer Feedback: While customer surveys and feedback are valuable, they may not represent the views of all customers, leading to potential biases in the data.
2. Resource Constraints: Implementing new strategies and tools may require additional resources, including time, training, and financial investment, which could be challenging for the restaurant to allocate.

<u>Future Scope</u>

- Extended Data Collection: To gain more comprehensive insights, future projects could extend the data collection period to capture seasonal trends and long-term customer behaviour.
- Advanced Analytics: Incorporating advanced analytics techniques such as machine learning and predictive modelling could provide deeper insights into customer preferences and sales forecasting.
- Loyalty Programs: Developing and implementing a customer loyalty program could further enhance customer retention and repeat business.
- Technology Integration: Exploring new technologies, such as mobile ordering apps and AI-driven chatbots for customer service, could streamline operations and improve the customer experience.
- Integration with food delivery aggregators such as Swiggy and Zomato.