

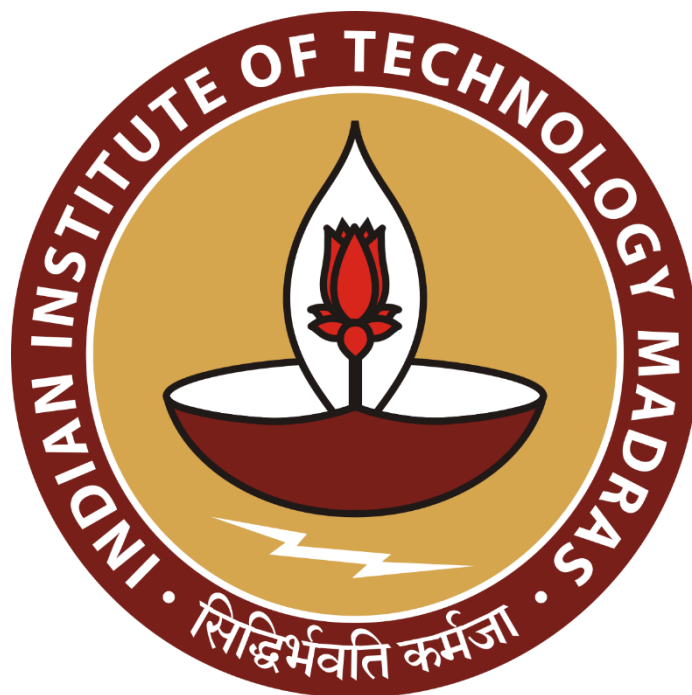
Maximizing Restaurant's Online Success

A Proposal report for the BDM capstone Project

Submitted by

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Declaration Statement

I am working on a Project titled “Maximizing Restaurant’s online success”. I extend my appreciation to Bhaj govindam owner “Mr. Mayank Kaushik” 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 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 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 fulfillment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.



Signature of Candidate: (**Digital Signature**)

Name: Mahi Mudgal

Date: 26/03/2024

Executive Summary

The project focuses on restaurant located at Pune. The business is B2C and deals in the segment of food serving activity.

The major business issues that the restaurant is facing are related to a very nominal profit on online business of restaurants. The issue can be solved by increasing online ratings, optimizing marketing investment and minimizing complaints.

The issues will be addressed by analyzing the data via different analytical approaches to obtain a fruitful outcome. Sentiment analysis on customer reviews, descriptive analytics on past orders are some of the examples of approaches we are going to use in our analysis.

The expected outcome is finding the best possible way to increase restaurant profitability by increasing customer satisfaction, managing investment cost.

Organization Background

The company I am currently employed with is Bhaj Govindam Restaurant, a renowned establishment founded by Mr. Mayank Kaushik in January 2023. Initially, it began as a dining restaurant named Bhaj Govindam on NIBM Road, Pune, later on as part of his culinary ventures, Mayank Kaushik introduced another restaurant called "Veg Tables." They expanded their presence with several outlets on restaurant delivery apps. Some of the virtual outlets are as follows: Bhaj Govindam Kharadi, Bhaj Govindam NIBM road ,Pind Paratha and Chaaps , Veg Mandarin Co and Veg Tables.

Problem Statement

Customer Dissatisfaction: High refund volume suggests issues with packaging, food quality, or portion sizes. I need to analyse complaints to pinpoint the culprit.

Operational Inefficiency: Food waste and stock unavailability impact cost and customer experience. Dish popularity analysis is crucial for improved stock management.

Limited customer knowledge: Limited customer knowledge hinders the restaurant from understanding customer preferences and offering personalized deals, thereby hindering performance improvements.

Outlets analysis: Maintaining multiple virtual outlets can be costly. Promotion and upkeep require resources. Analysing revenue and expenses helps us optimize our outlet network, identifying both high performers and those best shut down.

Pricing and Marketing: The restaurant faces challenges in setting prices and deciding the allocation of expenditure between offers and advertisements, which are critical aspects of its marketing

strategy.

Background of the Problem

1 Reducing Customer Dissatisfaction: -

- Problem: While seeing the complaints data I came to know that frequency of complaints is quite high. I observed many dismissed customer refunds complaints. Although some of them are not genuine but still this suggests there might be underlying issues with restaurant service that are leading to customer dissatisfaction.
- Potential culprits: By observing complaints raised by customers major reason appears to be:
 - Packaging: Food arriving damaged or leaking during delivery. (this refund handled by Zomato)
 - Food Quality: Issues like inconsistency, freshness, or not meeting taste expectations.
 - Portion Sizes: Customers feeling portions are too small for the price.

I try to find the dish which cause majority of complaints which was not answered by Owner due to any reason.

2. Operational Inefficiency: -

- Problem: While talking to the owner I came to know that food wastage and stock out is also the problem which arises often. This inefficiency impacts both their bottom line and customer satisfaction.
- Impact:
 - Cost: Wasted food increases our expenses and reduces profit margins.
 - Customer Experience: Stock unavailability leads to order cancellations and frustration for customers who can't get what they want.

Analysing most and least popular dishes helps in solving the above problem.

3. Limited Customer Knowledge: -

- Problem: While talking to the owner I came to know that Restaurants lack a deep understanding of customer preferences and buying habits.
- Impact: This hinders our ability to:
 - The owner currently struggles to effectively tailor their offerings to what resonates with customers.
 - The significant issue of customer retention stems from a lack of understanding of customer preferences and behaviours.
 - Adjust Strategy: They are missing valuable insights that could inform menu adjustments, pricing strategies, and marketing campaigns.

- Analysing customer reviews and rating might help in solving above issues

4.Pricing and Marketing: -

While talking to the owner, I came to know that pricing and marketing present significant challenges for the restaurant. Setting prices involves balancing costs, competition, and customer perception for optimal revenue. Allocating resources between offers and advertisements is crucial for attracting and retaining customers. Offers drive customer engagement and loyalty, while advertisements enhance brand visibility and acquisition. Balancing these aspects effectively within budget constraints is key to maximizing revenue and staying competitive in the market.

5.Virtual Outlet Optimization: -:

- Problem: Maintaining a large network of virtual outlets might not be the most efficient use of resources.
- Challenges: Promotion and upkeep of each virtual outlet requires investment in marketing and staff.
- Need for Optimization: Analysing revenue and expenditure will help us identify:
 - High Performers: Outlets driving significant sales and positive customer experiences.
 - Underperformers: Outlets with low revenue and potentially high operational costs.

By addressing these background issues, we can significantly improve customer satisfaction, optimize operational efficiency, gain valuable customer insights, and create a more profitable and sustainable business model.

Problem Solving Approach

Details about the methods used with Justification:

The approach to addressing the challenges faced by the restaurant, I used a multifaceted methodology aimed at comprehensively understanding and enhancing customer satisfaction, operational efficiency, and revenue optimization.

Firstly, I utilize sentiment analysis as a pivotal tool to delve into the sentiments expressed in customer reviews and ratings. By categorizing these sentiments into three distinct groups - positive, negative, and neutral - I gain valuable insights into the factors influencing customer reviews. This analysis serves as a cornerstone for identifying areas of both satisfaction and dissatisfaction, guiding me in formulating targeted strategies to enhance overall customer experience. Moreover, my methodology extends to conducting root cause analysis to ascertain the underlying reasons behind customer satisfaction and dissatisfaction. By delving deep into the sentiment analysis results, I aim to pinpoint specific factors driving customer sentiments, thereby enabling me to provide actionable recommendations for improvement.

Additionally, I undertake a comparative analysis of revenue and expenditure generated by each outlet to identify their respective performances. This evaluation aids in distinguishing the most and least profitable outlets, facilitating informed decision-making regarding the potential expansion of virtual outlets. Furthermore, comparing expenditure and revenue generated by advertisements and offers helps me understand where to invest more. By analyzing ordered dishes, I gain insights into the popularity of menu items, thereby optimizing stock management to mitigate issues such as stockouts and excess inventory. Analyzing preparation time also helps in improving operational efficiency.

Furthermore, my methodology encompasses customer segmentation based on ordering frequencies, enabling me to discern the traits of regular customers. This segmentation facilitates targeted marketing efforts and personalized service offerings, fostering stronger customer relationships and loyalty. Doing predictive analysis helps in predicting famous food item in a particular month based on previous data helps in reducing stock management issues and increase productivity. Price-elasticity analysis is also used to determine the optimal price based on sales.

Details about the intended data collection with Justification:

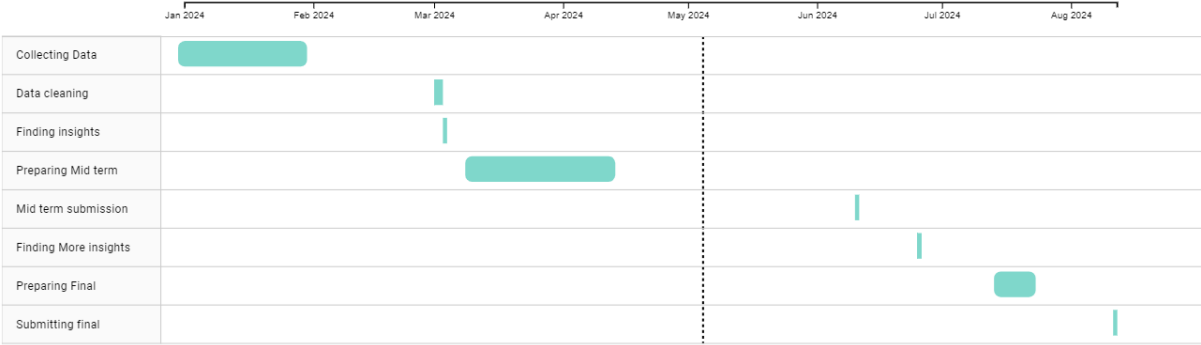
To effectively implement methodology, I rely on comprehensive data collection comprising customer reviews, complaints, revenue data, and other pertinent information. The owner of the restaurant has graciously provided monthly invoices and data sourced from their online Zomato business, furnishing me with a rich dataset for analysis. This robust data collection approach ensures that I have access to the necessary information to address the identified challenges effectively.

Details about the analysis tools with Justification:

I mainly use Excel for my analysis. It has many tools like regression analysis, sentiment analysis, and pivot tables for descriptive analysis. I can also make graphs to visualize data. Excel helps me predict future trends too. I also use Power BI sometimes. It's good for making visualizations easier to understand. It has a feature called drill-through that helps me explore data in more detail. Combining Excel and Power BI lets me analyze data thoroughly and share insights easily.

Expected Timeline

Gantt chart



Expected Outcome

Analysing complaints aids in identifying the primary sources of customer dissatisfaction. It facilitates pinpointing the specific food items that frequently trigger complaints, enabling proactive measures for improvement. By scrutinizing order data, we can discern the top-selling food items, providing valuable insights for optimizing inventory and marketing strategies.

Furthermore, analysing virtual outlets helps determine whether maintaining all outlets is necessary or if consolidating some could suffice. This optimization can streamline operations and resource allocation.

Conducting sentiment analysis on customer reviews is another valuable tool. It allows us to discern patterns in feedback, distinguishing between positive and negative sentiments. This insight enables targeted improvements in service quality and menu offerings, enhancing overall customer satisfaction.

In conclusion, leveraging various analytical methods, such as complaints analysis, order scrutiny, virtual outlet assessment, and sentiment analysis, empowers restaurant to make informed decisions that drive customer satisfaction and operational efficiency which leads to increase in profit.