

Reducing Stock Wastage And Increasing Profitability Of A Sweets Shop

A proposal report for the BDM Capstone Project

Submitted by:

Name: Dev Gupta

Roll No: 22f2000888



IITM Online BS Degree Program,
Indian Institute of Technology, Madras, Chennai
Tamil Nadu, India, 600036

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Declaration Statement

I am working on a project titled “Reducing Stock Wastage and Increasing Profitability of a Sweets Shop”. I extend my appreciation to **Aggarwal Sweets Corner**, 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:



Name: Dev Gupta

Date: January 27, 2024

1 Executive Summary

The project focuses on analyzing the challenges and providing recommendations faced by the business 'Aggarwal Sweets Corner', a sweets shop located in Main Market, Nihal Vihar, New Delhi. It offers various kinds of Indian sweets. The business solely operates in a B2C setting. The business serves both small customers as well as bulk orders.

The key challenge that the business is facing is related to the inability to align production with demand, leading to overproduction, expiration of stock, and ultimately reduced profit margins. As the owner is new to the business, he struggles to curate a pricing strategy to retain the customers and cover the manufacturing and other expenses. Also, the competition from other local sweet shops adds pressure to maintain affordable prices without compromising product quality.

To tackle the challenges that the business is facing, I am planning to analyze production and sales data to understand the extent of stock wastage by identifying patterns between production volumes and sales trends. This will help the business to plan production effectively. Secondly, I will gather the price list along with expense data to develop a dynamic pricing strategy based on market conditions that will help the business enhance their sales and better inventory turnover.

2 Organization Background

The business that I am working with is Aggarwal Sweets Corner. The business is located at the entrance of the main market in Nihal Vihar, New Delhi. It is a for-profit B2C organization that was started by Mr. Mukesh Aggarwal in August 2019. The shop offers various kinds of sweets, such as Barfi, Rasgulla, and Laddoos. They also offer some seasonal sweets like Gajar ka halwa, Ghewar, Gujiya, etc. The owner also sells packaged branded sweets and snacks like namkeen, beverages, and cookies. The business manufactures the sweets in-house. They use relatively good quality of milk, khoya, and other raw materials to prepare sweets as compared to other sweets shops in the locality. The proprietor currently relies on just one vendor for khoya. The owner operates the business on a two-storey rented premise. The shop is on the ground floor, while the manufacturing of sweets is done on the second floor.

3 Problem Statement

I have identified the following business problems from the discussion with the owner:

1. Issues in estimating production to match with the sales demand, causing overproduction and stock wastage.
2. Lack of a dynamic pricing strategy affecting profitability, resulting in missed revenue during peak seasons and excess inventory during slow periods.
3. Absence of online sales channels restricting access to larger customer base and slower inventory turnover.

4 Background of the Problem

The Indian sweets have a short shelf life ranging from three to seven days, depending on the weather conditions and seasons. The business does not use any kind of preservatives or additives to increase the shelf life because of two reasons. First, it might create license issues from municipal corporations. Second, the sweets are also consumed during fasting. So, the owner wants to maintain the originality and product quality.

The absence of ERP (Enterprise Resource Planning) tools restricts the business to identify seasonal sales trends and customer behaviour, which leads to mismanagement of inventory levels, increased wastage, and reduced profit margins due to the inability to recover costs from unsold stock.

Secondly, the business faces dynamic pricing issues to earn appropriate margins to meet operating costs. There is a lack of dynamic pricing strategy based on market conditions, such as seasons and demand. This prevents the business from adjusting prices in a way that ensures products are not sold at a loss or wasted. The absence of tools to manage daily transactions and customer feedback makes it difficult to figure out the right selling price to cover expenses and earn profits.

5 Problem Solving Approach

5a. Details about the methods used with justification

To address the above mentioned issues, I will follow a systematic approach:

1. Time-Series Analysis: I will perform time-series analysis to identify sales trends during festivals, cultural and political events, etc. The time-series analysis will also expose high and low demand periods. This will be helpful in planning production.
2. Demographic Research: I am planning to engage with the owner to learn more about population demographics in the region where the business operates. This will help me in identifying key events people do celebrate most in the region, their purchasing power to curate the right prices to attract more customers.
3. Competitor Analysis: I will also try to gather more information about the competitors of Aggarwal Sweets Corner to learn about their prices and product quality. This will help me in detecting gaps and finding potential opportunities.

5b. Details about the intended data collection with justification

1. Manufacturing Data: I will collect sweets manufacturing data to determine how many kilograms of sweets are produced. This data is essential for analyzing current production levels and estimating future production to minimize sweets wastage.
2. Production Cost Data: I will collect cost data for producing each type of sweet, such as raw material cost, labor, gas, etc. This will help in understanding costs required to make each type of sweet, and setting up profitable and dynamic prices.
3. Sales Data: I will gather sales data from the owner which includes quantities sold and selling prices. This will help in identifying sales trends and demand patterns.

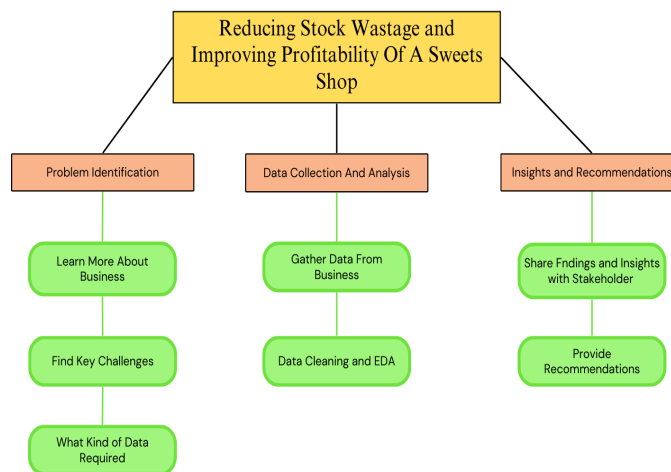
The expenses and sales data together will help me in developing the pricing strategy to enhance the profitability of the business.

5c. Details about the analysis tools with justification

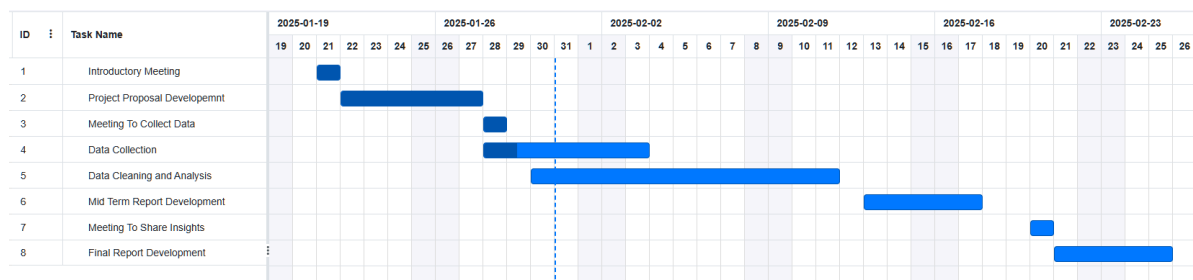
As the owner does not have dedicated tools to manage data, I have to manually put the data in spreadsheets for analysis. Also, for data cleaning and data visualization, I will mainly use Microsoft Excel or Google Sheets for this purpose. I will be using the pivot tables feature extensively for data aggregation and summarization.

6 Expected Timeline

Work Breakdown Structure:



Gantt Chart:



7 Expected Outcome

The analysis is expected to achieve the following outcomes:

1. Improving alignment of production with sales demand and reducing overproduction.
2. Reducing operating expenses and losses by minimizing stock expiration.
3. Increasing revenue and profitability with dynamic pricing strategy based on market conditions.
4. Discovering new sales channels to increase sweets sales and improve inventory turnover.
5. Establishing a system to record customer feedback for better relationships.