

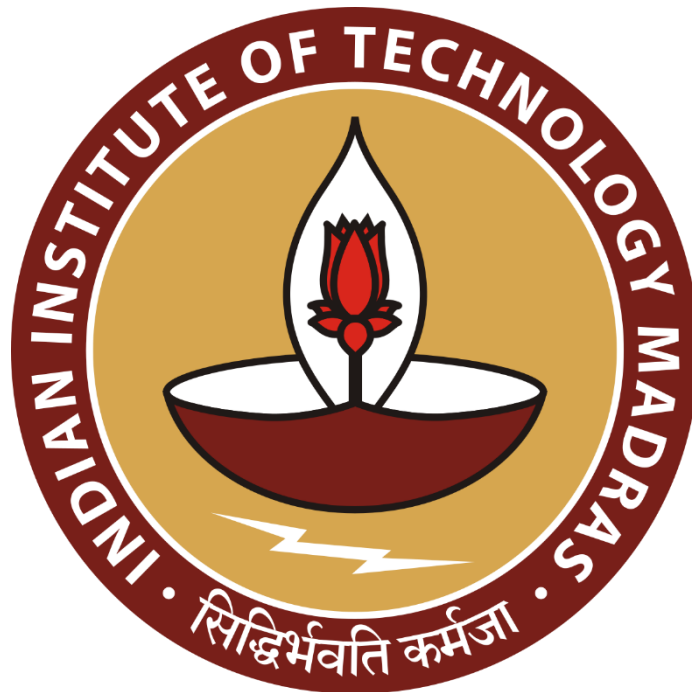
“Revitalize & Thrive: Elevating sales and service through demand driven strategies”

A Proposal report for the BDM capstone Project

Submitted by

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Declaration Statement

I am working on a Project titled “Revitalize & Thrive: Elevating sales and service through demand driven strategies”. I extend my appreciation to “HP Petrol Pump - Mullick Filling Station”, 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.

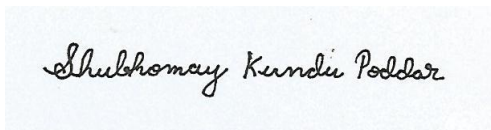
Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

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)**

A digital signature of Shubhomay Kundu Poddar, written in a cursive script, is displayed within a light blue rectangular box.

Name: SHUBHOMAY KUNDU PODDAR

Date: 05.03.2024

1. Executive Summary and Title

The project focuses on a HP petrol pump located at State Highway 6, Benipur, Tribeni, Hooghly, West Bengal. The business is B2C and deals in the segment of fuel retail, specializing in selling petrol, diesel and power fuels to consumers.

The first major business issue that the organization is facing is related to lesser amount of sales of power fuels than petrol fuels (even if power fuels are much better in terms of quality than petrol fuels). This is due to higher price of power fuels than that of petrol fuels. The second major business issue that the organization is facing is related to less availability of number of workers or rather uncertain leave of workers. This might be due to the fact that workers are less paid.

First and foremost, conducting a SWOT analysis is required to identify the strengths, weakness, opportunities and threats of the business. This can prove helpful while finding solution to any business problem. The issues then can be well addressed by analyzing the sales data via different analytical approaches to obtain a fruitful outcome. Also, conducting market research in form of surveys can be very helpful to solve our problems. Analyzing sales of all fuels together can prove beneficial in finding some trends or any pattern in customer behavior and based on that solutions to problems will be provided. Conducting surveys on workers demand can prove beneficial on addressing the second issue.

The expected outcome will help increase sales, which in turn helps increase the profitability of the organization.

2. Organization Background

I am working with the company named Mullick Filling Station which is a well-established dealership business under Hindustan Petroleum, specializing in the retail sales of petrol, diesel, and power fuels located at State highway-6, Benipur, Tribeni, Hooghly, West Bengal. Established on April 22nd, 1965, by Lt. Hazi Zalolath Hussain Mullick, it initially specialized in retailing petrol and diesel. With time, the company expanded its product line to include power fuel.

Over the years, Mullick Filling Station underwent significant transitions. After the passing of Hazi Zalolath, Lt. Mohammed Rufikul Alam, his son, became a pivotal partner. Subsequently, partnerships shifted, with Rufikul Alam collaborating with his cousin, Lt. Noor Alam Mullick, before forming a partnership with his wife, Lt. Jibannesa Mullick, in 1980.

In 1996, Mohammed Zulfiquar Ali Mullick, Rufikul Alam's son, assumed control of the business, initially partnering with his father in a 70:30 ownership split. Following Rufikul Alam's demise in 2014, Zulfiquar Ali Mullick continued as the sole proprietor until December 6th, 2019. After December 6th, 2019 he welcomed his wife, Mrs. Foujyaiftakari Mullick, as a partner, maintaining a 70:30 ownership structure till now.

3. Problem Statement (Listed as objectives)

- 3.1) **Problem statement 1:** To increase the amount of sales of power fuels with relative to sales of petrol fuels.
- 3.2) **Problem statement 2:** To reduce the problem of unnecessary leaves of workers or less number of workers.
- 3.3) **Problem statement 3:** To ensure maximum availability of workers during days of the week which contributes more to the sales by some demand driven strategies.

4. Background of the Problem

The first major problem the business is facing is related to lesser amount of sales of power fuels relative to sales of petrol fuels even if power fuels are much better in terms of quality than petrol fuels. The price of petrol in this petrol pump is Rs. 106.43/L whereas the price of power is Rs. 113.57/L. Due to this Rs. 7/L difference in price people are more likely to compromise quality and tend to buy petrol fuels as it is cheaper than power fuels. The business did start to sell turbojet (better quality fuel than diesel) a long years ago. Again due to high price of turbojet, vehicles availing diesel did not opt for turbojet at all. So the business had to stop selling turbojet fuels and then it started selling power. Now in case of vehicles availing petrol some customers are also opting for power fuels. Now the business doesn't want to take harsh decision of stopping sales of power which might affect company's profit and hence wants to increase sales of power.

The second major business issue that the organization is facing is related to less availability of number of workers or rather uncertain leave of workers. This might be due to the fact that workers are less paid compared to amount of work done. According to the business owner, the monthly wage for a new worker is Rs. 6000 for working 8 hours a day and Rs. 8000 for working 12 hours a day. The monthly wage is too low compared to duration of duty hours and the business owner might not be willing to pay more than that. Due to this fact workers tend to take uncertain leaves from their work or permanently leave the job. For this reason, sometimes it results in a backlog of customers at the petrol pump. Consequently, the time taken to serve each customer increases, leading to instances where other customers opt for other petrol pumps due to extended wait times.

5. Problem Solving Approach

Addressing the challenges faced by a petrol pump with lesser sales of power fuels compared to petrol fuels and issues such as unnecessary leaves of workers or a shortage of affordable labor requires a comprehensive problem-solving approach. Some suggested approach that will be taken:

- 1) **SWOT Analysis:** Identifying the strengths, weakness, opportunities and threats of the petrol pump business. This can solve maximum of our problems by conducting a SWOT analysis.
- 2) **Analyze Sales Data:** Examining sales data to understand patterns and trends. Identifying why power fuels are selling the least and explore potential reasons behind it. Is it due to pricing, marketing, or lack of demand in the area?
- 3) **Market Research:** Conducting of market research to understand customer preferences and demands in the area served by the petrol pump. This could involve surveys, focus groups, or analyzing sales data.
- 4) **Review Pricing Strategy:** Evaluating the pricing strategy for power fuels compared to petrol fuels. Consider if the pricing is competitive and if there are opportunities for promotions or discounts to attract more customers.
- 5) **Employee Management:** Assessing if there are any underlying issues leading to unnecessary leaves. It could be related to dissatisfaction, workload, or other factors. Open communication channels with employees to understand their concerns and suggestions.
- 6) **Motivation:** Motivate workers through incentives or recognition programs, to reduce absenteeism and improve performance.
- 7) **Recruitment and Retention:** If there's a shortage of cheap labor, explore alternative recruitment strategies such as hiring part-time or temporary workers, offering flexible work arrangements.
- 8) **Diversification:** Exploration of diversification opportunities such as offering additional services such as refilling of air in tyres or products such as lubricating oil that complement the core business. This could help attract more customers and increase revenue streams.
- 9) **Continuous Improvement:** Establish a culture of continuous improvement where feedback is encouraged, and processes are regularly reviewed and refined to adapt to changing market conditions and customer needs.
- 10) **Awareness program:** Conducting awareness program about the quality of different fuel products and services the business is providing. This would led to both customer satisfaction in using the fuel products and help increase profitability of the business.

For analyzing sales data we will make use of Excel, Power BI and Python (if required). Excel and Power BI will be very helpful in dealing with making charts such as pie chart, bar chart and other such charts to visualize data with more ease and in an understandable way. This would help recognize any trends or pattern in the sales data and help in understanding the distribution of sales of all fuels. Python may be required in order to give some future predictions (if required) related to sales.

By adopting a systematic problem-solving approach and implementing appropriate strategies, the petrol pump can address the challenges it faces and work towards improving sales of power fuels while optimizing workforce management.

6. Expected Timeline

6.1) Work Breakdown Structure:

The work breakdown structure is given as follows and will be followed in the sequential order given below:

1) Collecting data:

1.1) Collecting of data related to sales of all types of fuels

2) Conducting survey:

2.1) Identifying key data points on which survey is to be conducted

2.2) Designing of survey questions

2.3) Collecting responses

3) Data Cleaning:

3.1) Arranging raw data in a structured format in Excel

3.2) Identifying and correcting errors if present

3.3) Handling missing data if present

4) Finding Insights:

4.1) Data exploration

4.2) Statistical analysis

4.3) Developing initial insights

5) Midterm Submission Preparation:

5.1) Compile findings

5.2) Drafting of midterm report

5.3) Internal review and edits

5.4) Submit for approval

6) Further Analysis While Waiting for Approval:

6.1) Conduct additional analysis

6.2) Refine insights obtained

7) Midterm Approved: If approved we go to next step or else work again on the midterm submission.

8) Finding problem solution:

8.1) Identifying some potential solutions

8.2) Evaluating solutions and select feasible solutions

9) Final Submission Preparation:

9.1) Compile final findings and solution

9.2) Drafting of final report

9.3) Internal review and edits

9.4) Submit for final approval

10) **Preparing slides while waiting for final approval:**

10.1) Prepare presentation slides

10.2) Outline key points

10.3) Design slides

11) **Final Approval:**

11.1) Present my findings

6.2) **Gantt chart:**

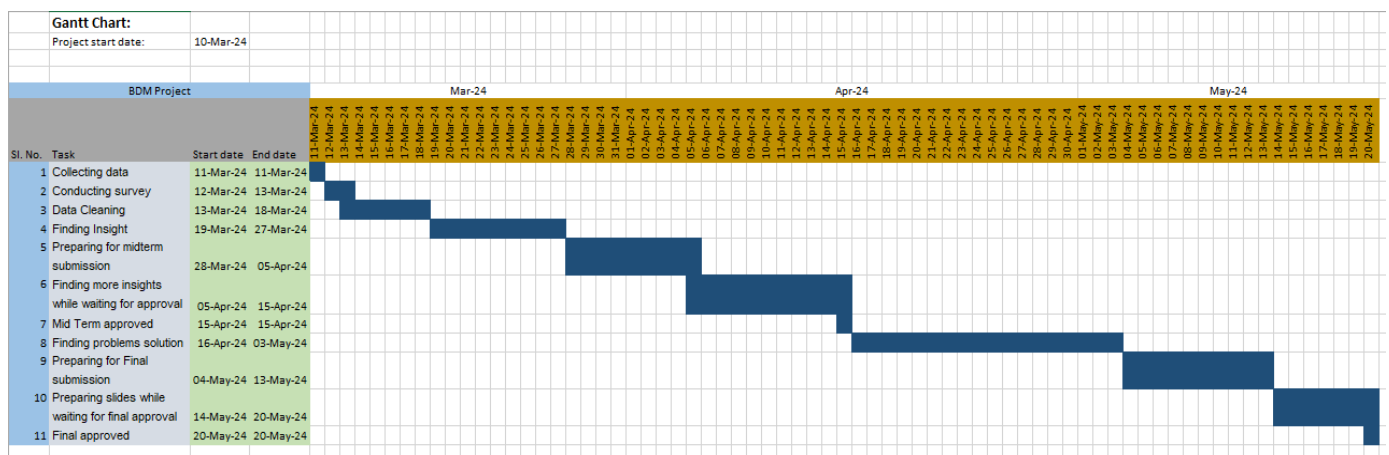


Figure 1 Expected timeline for completion of project.

7. Expected Outcome

The expected outcomes of this project are listed below:

- 1) Better understanding of which fuel types are more sold.
- 2) Understand which fuel type contributes more in terms of revenue.
- 3) Able to withhold more number of workers compared to earlier times in order to prevent backlog of customers and hence prevent extended wait times.
- 4) Determining which weekdays and which week out of four weeks in a month contributes to maximum total average sales of all fuels.
- 5) Better understanding of customer behavior consuming power fuels with respect to petrol fuels by analyzing sales data.
- 6) Determining any trends or patterns in a weekly or monthly basis of sales of different fuels.