

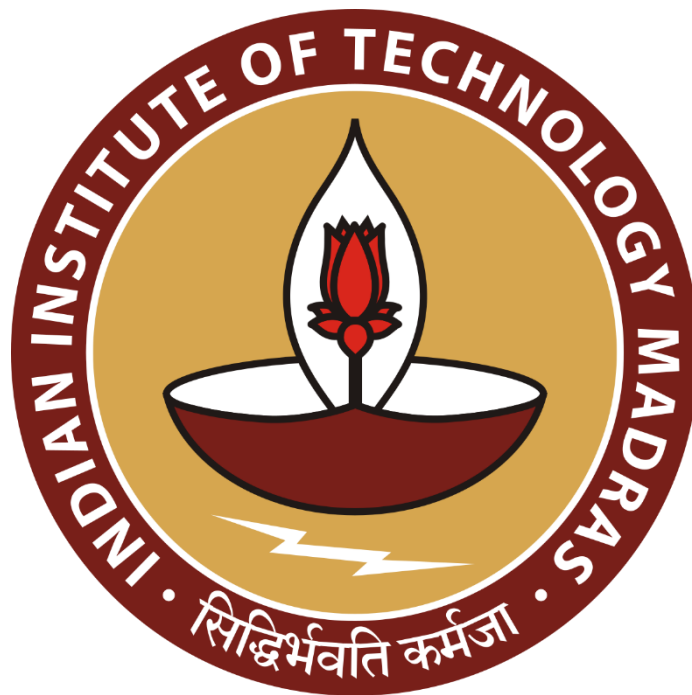
Title of Your Project

A Proposal report for the BDM capstone Project

Submitted by

Name: BANOTH PAVAN

Roll number: 21f1002144



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

Contents

1	Executive Summary and Title (200 Words).....	2
2	Organisation Background (150 Words).....	2
3	Problem Statement (Listed as objectives) (50-75 Words)	3
3.1	Problem statement 1: Explanation in 1-2 lines.....	3
3.2	Problem statement 2: Explanation in 1-2 lines.....	3
3.3	Problem statement 2: Explanation in 1-2 lines.....	3
4	Background of the Problem (200 Words)	3
5	Problem Solving Approach (400 Words).....	3
6	Expected Timeline.....	4
7	Expected Outcome.....	5

1 Executive Summary and Title

Title of this project is “Enhancing Profitability and Inventory Management”. Sri Manikanta electricals, a thriving electronics retail establishment situated in Thimmarao Pet, Khammam, Telangana. Founded on December 6, 2019. Specializing in electronic goods, the organization has carved a niche for itself within the local market.

The organization faces a challenge in keeping pace with the rapidly evolving consumer preferences, timely maintaining stocks, maintaining relation with dealers, book keeping process and technological advancements.

A comprehensive data will be amassed, encompassing sales transactions, inventory levels, supplier particulars, customer demographics, and store performance metrics. Rigorous procedures for data refinement and validation will be implemented, assuring a foundation of accuracy and unwavering coherence.

This project aims proper way to collect the data and a systematic way to analyze and manage collected data to enhance profits, inventory management and reach the expectations of customer's demand. I aim to optimize operations, reduce costs, and improve customer satisfaction and also profitability of electrical stores.

2 Organization Background

"Sri Manikanta Electronics" is a pioneering electronics retailer that has been shaping the technology landscape since its inception. Established by visionary entrepreneur Mr. Uggam Gopi on December 6, 2019 the store has rapidly evolved into a leading establishment in the electronics industry. XYZ Electronics specializes in offering a diverse array of cutting-edge electronic products, catering to the ever-changing needs of its clientele.

Manikanta electronics offers various types of electronic items. Electronic items include switch boards, electric wires, pipes, PVC conduit pipes & fittings, casing capping & fittings, electrical switches, wires & cables, boxes & enclosures, distribution switchgear, electrical doorbells and other electrical accessories.

Sri Manikanta Electricals is not merely a retail store but a technological haven that exemplifies innovation, customer-centricity, and community integration. Through its dedication to offering cutting-edge electronics and fostering meaningful relationships with customers and suppliers alike, Sri Manikanta has solidified its position as a trailblazer in the local area.

3 Problem Statement

3.1 Profitability Maximization:

Despite its market presence, Sri Manikanta electricals faces profitability challenges attributed to inefficiencies in cost management, hindering the organization's ability to realize its full revenue potential.

3.2 Inefficient Inventory Management:

The current inventory management practices at Sri Manikanta electricals lack optimization, leading to overstocking and understocking issues, negatively impacting operational efficiency and financial performance.

3.3 Data-Driven Decision-Making:

The organization lacks a comprehensive system for deriving actionable insights from the amassed data. This hampers informed decision-making and prevents the optimization of various operational facets.

4 Background of the Problem (200 Words)

Sri Manikanta Electricals operates with disparate systems for inventory, sales, and customer data. This lack of integration hinders seamless data flow and real-time insights, leading to uninformed decision-making.

The market landscape has witnessed a shift in customer expectations towards personalized experiences and speedy deliveries. struggles to adapt to these evolving preferences, impacting customer loyalty and market share.

The electricals industry is fiercely competitive, with several players vying for market dominance. Sri Manikanta electricals faces challenges in differentiating its offerings and maintaining a competitive edge

External factors like supply chain disruptions, geopolitical uncertainties, and regulatory changes directly influence Sri Manikanta electricals' ability to source materials and meet customer demands efficiently.

5 Problem Solving Approach

To address the identified problems, I propose following approach:

5.1 Details about the Methods:

In pursuit of the optimal solution for the given problem, a thorough understanding of the data through graphical representation is essential. Various statistical techniques will be employed, necessitating the exploration of diverse approaches.

- a. Gathering Data: A combination of quantitative and qualitative methods will be utilized, encompassing point-of-sale records, customer surveys, and purchase histories. This comprehensive approach aims to provide deep insights into both store operations and customer behaviors.
- b. Analyzing Data: The analysis phase will encompass descriptive and predictive analytics. These techniques will enable the identification of emerging trends, accurate demand forecasting, and optimization of inventory levels. Ultimately, this analytical approach will empower informed decision-making.

5.2 Details about the Intended Data Collection:

After clarifying the project's benefits to the store owner, I obtained the necessary data. This initial data review highlighted specific categories that require attention, alongside the utilization of the following methods:

- a. Customer Surveys: Employed to collect valuable insights into customer preferences and satisfaction levels, providing the basis for precise marketing strategies. For this I will design a questionnaire which consists questions about customer's needs and satisfaction. I will design questions in very understanding, for example ranking his experience on the scale of 1 to 5.
- b. Purchase History: Analysed to uncover historical sales patterns, enabling the identification of seasonal trends and customer preferences. For this I will ask the owner for his past bills of purchasing items. This will help in analysing the inventory.

5.3 Details about the Analysis tools:

Effective data analysis begins with meticulous data cleaning, a vital process that ensures data accuracy and reliability. This involves purging irrelevant information, establishing uniform data standards, addressing gaps in the dataset, and validating its integrity.

- a. Excel: Employ Excel as an initial step for data refinement and the creation of informative graphs and charts. Tools like pivot table and methods like Trim, Upper, Lower, Data validation etc. Bar graph, Pie diagram and Scatter plot are going to be used.
- b. Data Visualization Tools: Harness the power of advanced tools like 'Tableau' to visually convey insights using intuitive graphs and charts, elevating the quality of decision-making processes.

6 Expected Timeline

6.1 Work Breakdown Structure: Ref:

1. <https://acqnotes.com/acqnote/careerfields/work-breakdown-structure>

2. <https://www.wrike.com/project-management-guide/fag/what-is-work-breakdown-structure-in-project-management/>

6.2 Gantt chart

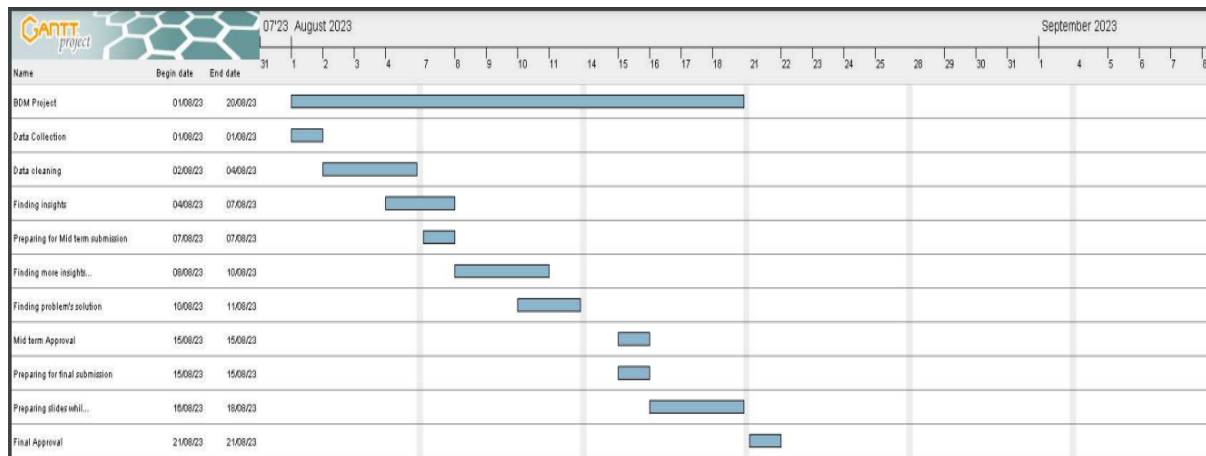


Figure 1 Expected timeline for completion of project.

7 Expected Outcome

7.1, Enhanced Inventory Planning and Sales Prediction: By leveraging advanced demand forecasting techniques and data analytics, Sri Manikanta Electricals can expect a significant improvement in inventory planning. Accurate demand projections will facilitate optimized stocking levels, minimizing excess inventory and associated carrying costs. This will return in profit maximization by a certain percentage.

7.2. Data driven decision-making: The data-driven approach will provide insights into the main reasons behind returns. By analyzing customer feedback, purchase patterns, and historical return data, Sri Manikanta Electricals can identify products with high return percentages and understand the underlying factors.

7.3. Continuous Improvement and Adaptation: The implementation of regular monitoring and reviews will empower Sri Manikanta Electricals to continuously assess the effectiveness of its strategies. Through data-driven insights, the organization can identify areas for improvement and adapt its approaches to changing market dynamics.

