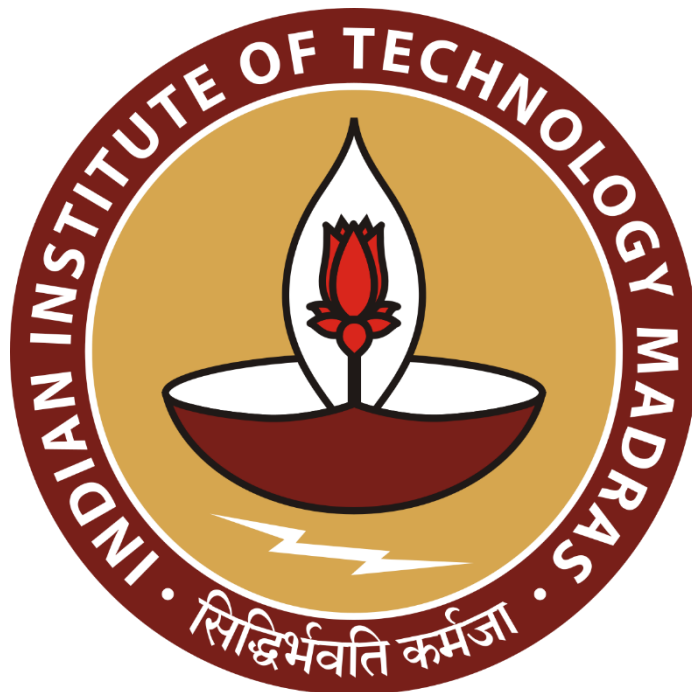# Sales Forecasting for Jain's Kirana Store

A Proposal report for the BDM capstone Project

Submitted by

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Declaration Statement

I am working on a Project Title Sales Forecasting for Jain's Kirana Store. I extend my appreciation to **Jain's Kirana store**], 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.

Harsh Pratap

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

Name:

Date:

1. Executive Summary:

Jain's Kirana Store is a small grocery store located in Village daulari Dist. Moradabad, operating as a B2C business in the retail segment. The store aims to provide quality products to its customers while ensuring a profitable business model.

The major business issue faced by Jain's Kirana Store is a nominal profit margin due to a large number of inventory stocks. This has resulted in a significant blockage of money, affecting the overall profitability of the organization.

To address this issue, we plan to analyze the data using Excel-based analytical approaches, including:

- Data visualization using charts and graphs to identify trends and patterns in sales and inventory data
- Pivot tables to summarize and analyze large datasets
- Formula-based calculations to optimize inventory levels and reduce stockouts and overstocking

By leveraging these Excel-based approaches, we aim to reduce the money blockage in terms of inventory, leading to an increase in the profitability of the organization.

2. Organization Background:

Jains Kirana Store is a small, family-owned grocery store located in Village daulari Dist. Moradabad. It is a for-profit business that operates as a retail store, providing a wide range of daily essentials and household products to its customers. The store was established in 2010 by Mr. Subham Jain with the aim of providing quality products at competitive prices to the local community. Over the years, the store has built a loyal customer base and has become a trusted name in the neighborhood. Jains Kirana Store operates a brick-and-mortar store, with two people managing the day-to-day operations. Despite its small size, the store has a strong reputation for its personalized service and commitment to customer satisfaction.

3. Problem Statement:

Jains Kirana Store is facing a major business issue of nominal profit margin due to a large number of inventory stocks. This has resulted in a significant blockage of money, affecting the overall profitability of the organization.

1. Overstocking: The store is carrying a large amount of inventory, which is not selling quickly enough, resulting in a significant blockage of money.
2. Stockouts: Despite carrying a large inventory, the store is still experiencing stockouts of fast-selling items, leading to lost sales and revenue.
3. Limited Cash Flow: The store's cash flow is limited due to the large amount of money tied up in inventory, making it difficult to invest in other areas of the business.
4. Profit Margin: The store's profit margin is lower than desired due to the high cost of carrying excess inventory.

These problem statements highlight the gaps in knowledge and practices at Jains Kirana Store that this research aims to address, with the ultimate goal of improving inventory management practices and increasing profit margins.

4. Background of the Problem:

The primary cause of the problem is the lack of a robust inventory management system that can accurately forecast demand, track inventory levels, and optimize stock replenishment. This has led to overstocking of slow-moving items and stockouts of fast-selling items, resulting in a significant blockage of money and lost sales.

Internal Problems

Internal factors contributing to the problem include:

- Inadequate inventory management skills and knowledge among store staff

- Insufficient use of technology, such as not tracking the sales or purchase history.

External Problems

External factors contributing to the problem include:

- Fluctuations in market demand and consumer behavior, making it difficult to accurately forecast demand
- Intense competition in the retail industry, leading to pressure to maintain high inventory levels to meet customer demand

5. Problem Solving Approach:

Intended data collection:

The intended data collection method for this project is to collect purchasing bills from Jains Kirana Store on a weekly basis. The data will be collected for the top 30 items sold at the store, including items such as biscuits, sugar, and tobacco. The data collection process will involve the following steps:

1. Data Collection: The data will be collected on a weekly basis by physically visiting the store and collecting purchasing bills. The bills will be collected for a period of 3 months, resulting in a total of 12 weeks of data.
2. Data Entry: The collected data will be entered into an Excel spreadsheet for further analysis. The data will include information such as the date of purchase, the quantity of each item purchased, and the cost of each item.
3. Data Cleaning: After entering the data, it will be cleaned and validated to ensure accuracy. Any errors or inconsistencies in the data will be corrected before proceeding with the analysis.

Data Analysis using Excel:

The following data analysis approaches will be employed using Excel:

- Descriptive Analytics: Excel's built-in functions, such as AVERAGE, MEDIAN, and STDEV, will be used to analyze the historical sales data and identify trends, patterns, and seasonality in demand.
- Data Visualization: Excel's charting and visualization tools, such as column charts, line charts, and scatter plots, will be used to present the data and analysis results in a clear and concise manner.
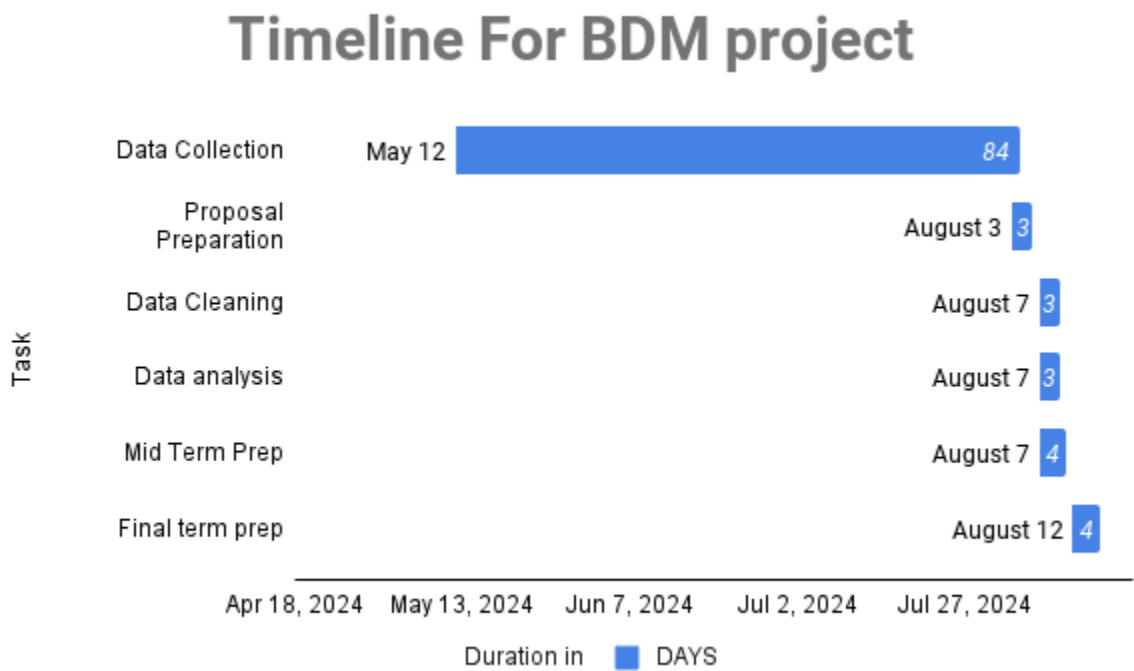
We will also be going to use different other methods.

6. Expected Timeline:

A. Work Breakdown Structure:

B. Gantt chart
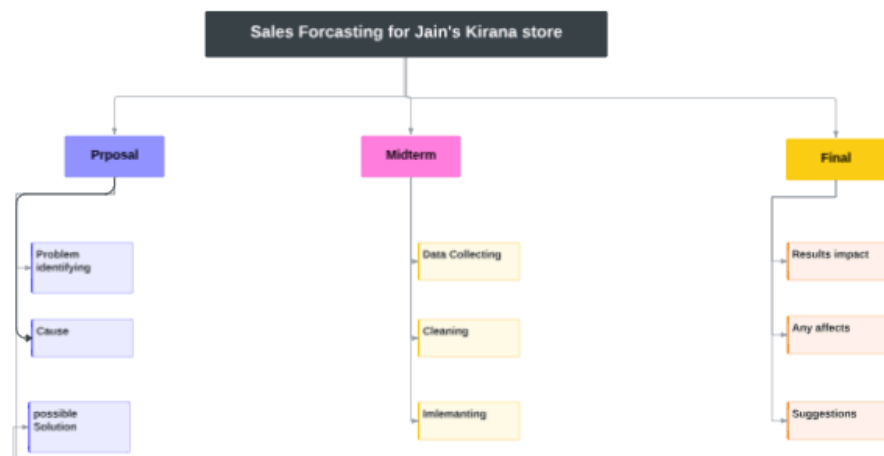
Timeline For BDM project

7. Expected Outcome:

7.1 Improved Inventory Management The project aims to provide better inventory planning and a deeper understanding of which products are in high demand. This will enable the organization to optimize inventory levels, reduce stockouts, and minimize overstocking.

7.2 Reduced Returns By analyzing the main reasons behind returns, the project will identify products with high return percentages. This insight will help the organization to take corrective actions, such as improving product quality, modifying packaging, or enhancing customer communication, to reduce returns and associated costs.