

Smarter Sales & Stock Control for Shivam Book Depot & Stationery Shop

A Proposal report for the BDM Capstone Project IIT Madras

Submitted by

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Declaration Statement

I am working on a Project titled “**Smarter Sales & Stock Control for Shivam Book Depot & Stationery Shop**”. I extend my appreciation to **Shivam Book Depot & Stationery Shop**, for providing the necessary resources that enabled me to conduct my project.

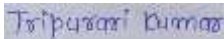
I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost of my knowledge and capabilities. The data has been gathered from primary sources and carefully analyzed to assure its reliability.

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 through 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 measure imposed by the relevant authority.

I agree that all the recommendation 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: Tripurari Kumar

Date: 16-04-2025

Executive Summary and Title

Shivam Book Depot & Stationery Shop is located in Vixxxxxxa Colony, India. It is a B2C small stationery shop in this colony that primarily serves students and working professional. The store supplies essential academic and office items such as exercise books, ball pens, water colors and many others.

Shivam Book Depot & Stationery Shop, a local retailer in Vixxxxxxa Colony, is facing challenges in maintaining efficient inventory management. One of the key issues is overstocking of slow-moving items, which ties up capital and reduces cash flow. Some items such as exercise books, markers, chart papers and certain office items remain unsold for long periods.

The shop is also struggling with seasonal sales patterns. During peak periods such as admission and exam time, there is a high demand for writing materials and geometry boxes, leading to stock shortages while in off-peak periods, sales drop significantly, this leading to an excess stock that takes months to clear.

To handle the challenges faced by Shivam Book Depot & Stationery Shop, I plan to use spreadsheet software for data visualization and trend identification. These approaches will help identify buy trends, estimate future demand, adjust inventory accordingly and improve margins. I will use Pivot Tables to analyze sales trends, Bar Charts and Line Graphs for profitability analysis, and Pareto Analysis to identify inventory issues, ensuring better stock management and improved profitability.

Organization Background

Shivam Book Depot & Stationery Shop was founded in 2020 by P***** P*****. This Stationery shop is located in Vixxxxxxa Colony, India. This shop provides high quality different type of stationery products that are essential for students and office.

This shop supplies academic and office essentials, including an exercise book, pencils, files, watercolors, chart paper etc. Shivam Book Depot & Stationary Shop also caters to common academic needs by offering document related services. Making it a one-stop solution for

educational and office related needs. With a commitment to quality and affordability, the shop has earned the trust of its customers over the years.

Through better inventory management and data analysis strategies, the business aims to enhance its operations, minimize stock and improve customer satisfaction.

Problem Statements

- 1. Seasonal Demand Variability:** Shivam Book Depot & Stationery shop experiences significant fluctuations in customer demand, particularly during admission seasons and exam time, students rush to buy notebooks, pens and other essentials items, causing frequent stock shortages. But once the peak season is over, sales drop.
- 2. Poor Inventory Management:** The business encounters a mismatch between stock and actual customer demand pattern. The shop buys items that do not sell quickly causing money to get stuck in unsold stock. These leads wasted storage space, and the shop struggles with cash flow, making it harder to invest in necessary stock.

Background of the Problem

Shivam Book Depot & Stationary Shop, located in Vixxxxxxa Colony, India, has been serving the local community since 2020. It offers a variety of stationery products and basic services. The Shop mainly caters to students, office worker, and nearby residents who rely on it for their day to day stationary needs. While the shop has earned customer trust over time, it is currently facing several operational challenges that are affecting its growth and profitability.

One of the major problems is poor inventory management. The shop often stocks more of certain items that do not sell quickly, like cardboard, highlighters and some office items. This leads unnecessary blocking of money and storage space. On the other hand during peak seasons such as school admission or exam periods essential items like notebooks, pens, pencils, erasers and many other items go out of stock quickly, resulting in missed sales opportunities.

Another issue is the lack of data driven planning. Since the shop does not analyze past sales data, it struggles to predict demand and manage stock efficiently. These challenges, if not addressed can hurt the shop's ability to grow serve customers wells and maintain profitability in a competitive market.

Problem Solving Approach

To help Shivam Book Depot & Stationary Shop overcome its current business challenges, I plan to use a structured and practical approach that includes data collection, analysis, and the use of appropriate function in excel. This approach will help in making better business decision based on facts and trends.

The main methods I will use sales data analysis through Excel. By collecting past sales records and stock details, I will look at what products sell the most during certain periods like school admission or exams times and which products remain unsold for a long time. This method is useful because it helps in understanding customer buying behavior and seasonal demands pattern. Additionally, I will use basic inventory tracing techniques to find out which items are being overstocked or understocked. These insights will help the shop maintain a balanced stock and avoid blocking money in unsold products.

The data I plan to collect includes product-wise monthly sales, purchase records, stock availability, and seasonal sales trends. I will also ask the shop owner to share details about customer footfall during different times of the year and commonly requested items that are out of stock. This kind of data will give a view of how the shop is performing and what needs to change.

For analysis, I will use Excel features like Pivot Tables to summarize sales and stock data, which will help in understanding trends. I will also use Bar Charts and Line Graphs to visually show how sales change over time. These tools make it easy to identify patterns and explain findings to the shop owner. I will apply Pareto Analysis (80/20) to find out which 20% of products bring in 80% of the sales. This will help the shop focus more on its best selling items and reduce wastage on low demand stock.

Expected Timeline

1. Work Breakdown Structure (WBS)

- 1.1.1. Discussion with Owner (April 10, 2025 – April 16, 2025)
- 1.1.2. Proposal Preparation (April 17, 2025 – April 21, 2025)
- 1.1.3. Data Collection and Cleaning (April 22, 2025 – May 20, 2025)
- 1.1.4. Data Analysis (May 21, 2025 – June 02, 2025)
- 1.1.5. Mid Term Report (June 03, 2025 – June 05, 2025)
- 1.1.6. Final Report (June 06, 2025 – June 20, 2025)

2. Gantt Chart

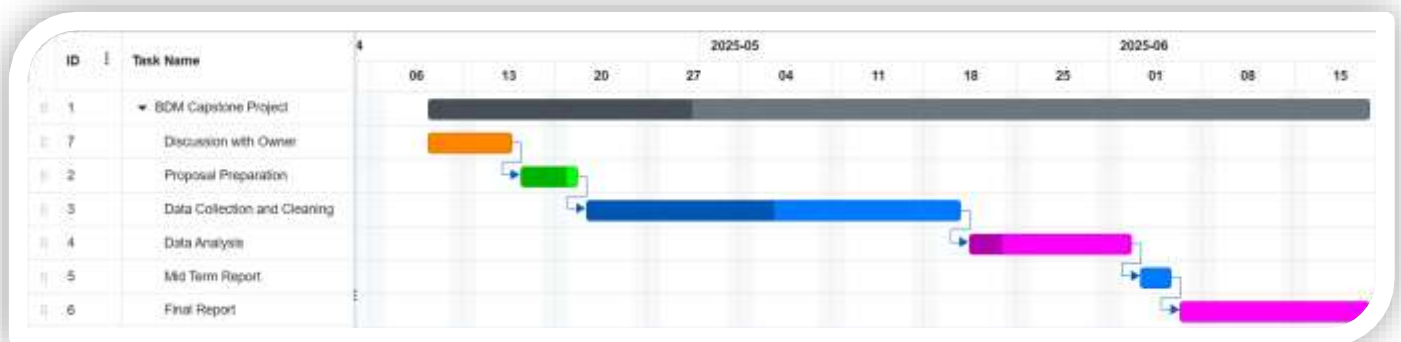


Figure 1 Gantt Chart for project

Expected Outcome

By using data analysis and better stock planning, Shivam book Depot is expected to manage its inventory more effectively. The shop will avoid overstocking items that do not sell and ensure popular items available during peak times. This will save space, reduce waste and improve cash flow.

The owner will also understand what products are needed in different seasons, helping to make smarter buying decisions. With the help of Excel tools like Pivot Tables and charts, it will be easier to see sales trends and take timely actions.

Overall, this approach will lead to better stock control, happy customers and increased profits.