

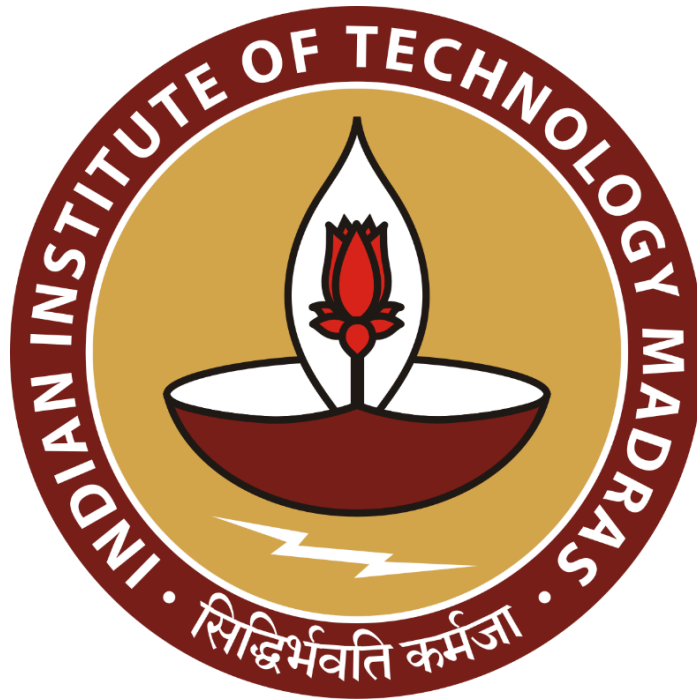
Weaving Business Insights: An Analytical Approach to a Retail Saree Store

A Proposal report for the BDM capstone Project

Submitted by :

Name : Pranav Sunil Darak

Roll number : 22f1000653



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 “Weaving Business Insights: An Analytical Approach to Saree Showroom Retail and Wholesale”. I extend my appreciation to **Rani’s Collection**, 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.

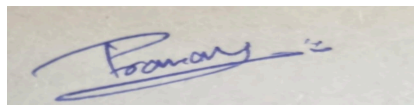
Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

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: Pranav Darak

Date: 23/10/2024

1 Executive Summary

‘Rani’s Collection’ is a small saree showroom based out of Chhatrapati Sambhaji Nagar. This project centers on studying, identifying and addressing the operational challenges faced by this business. This store is run by a couple who primarily focus on B2C markets, supplying to customers based on seasonal, occasional and regular needs.

The store is primarily struggling with inventory oversight, particularly managing the supplies in and out of the store. The excess inventory and dead stock is tying up the capital. Prices are not optimized according to the season or occasion as setting prices too high deters the customers and setting them too low hurts profit margins.

The project aims to approach these challenges by adopting a data-focused inventory management system that accurately tracks stock levels and cost-saving opportunities. By leveraging tools like Microsoft Excel, Python and Machine-learning, the store can simplify data handling and optimize decision making processes, ensuring inventory accuracy and optimizing prices for better sales and customer satisfaction.

2 Organization Background

Established in 2014, Rani’s collection quickly became the people's choice for Sarees and Ghagras in the city of Chhatrapati Sambhaji Nagar, Maharashtra. It is located on Block 9, RH colony, Near Jalna road. It is owned by a dynamic couple Mr. Sunil Darak and Mrs. Deepali Darak who managed to create a name for themselves in this category space in a short span of time. The owners have run this business full time for the past 11 years and continue to thrive in this market.

Away from the core market area, this business serves primarily B2B capacity. The store employs a total of 5 staff members, including 3 helpers and 2 salesmen. The store offers an exceptional collection of unique synthetic, designer, party-wear and everyday-wear sarees. They also have a special wedding collection for the Bride and others. They also specialize in specific types of sarees and Ghagras according to market trends like Ghatchola, Lehriya, Organza etc. The customers also can order their exclusive variety from their [Instagram](#) handle. They provide sarees catering to individual preferences and maintain exclusivity for their customers. Their way of handling business is compelled towards customer satisfaction which market.

3 Problem Statement

- 3.1 Since this is a natural problem of the Garments business that inventory piles up with changing seasonal tastes and trends. This excess inventory ties up capital and hampers the business growth.
- 3.2 Setting the right price is key to balancing customer demand and profit margins.. An optimal pricing strategy not only appeals to customers, driving demand and fostering loyalty, but also ensures sustainable profitability by covering costs and securing desired margins. Striking this balance enables a business to remain competitive while achieving financial goals, making pricing a pivotal factor in long-term business success.

4 Background of the Problem

In the garment business, Rani's Collection faces specific operational and financial challenges. Since, fashion is said to be a rapidly moving business, products cannot be guaranteed to perform in the long run. They struggle with managing and organizing inventory in their shop space. Since the space and capital is limited, overstocking impacts cash flow and understocking leads to lower customer satisfaction.

Consumer behavior in the fashion industry can create several challenges for businesses. Customers often have changing tastes and demand new styles frequently, which puts pressure on brands to keep up with trends and provide new collections quickly. This "fast fashion" demand leads to higher costs, as the suppliers may need to source materials and manufacture items at a faster pace, sometimes sacrificing quality.

Since, this business depends heavily on festive season and occasions, price needs to be kept optimized to maximize the profits. Unpredictable shopping habits, like bulk buying during sales and low spending during regular seasons, make it hard for store to plan inventory and predict revenue accurately. There is no such mechanism to determine the products which are performing well and which are underperforming. Store needs to rely on rough estimates to keep track of products and their sales. This results in loss of revenue at crucial times due to some product unavailability.

5 Problem Solving Approach

To tackle the inventory management issues faced by the store, a structured, data-driven and qualitative approach is essential. This approach combines a variety of methods, data-gathering techniques, and analytical tools, each carefully selected to enhance inventory control and price optimization. By using this systematic strategy, the store can streamline its stock management processes and improve its profitability.

a. **Methods Used :**

The store plans to implement a data-focused approach, leveraging past sales data and customer buying trends to accurately predict demand. This will allow for a clearer understanding of the most popular items, supporting improved inventory management. Furthermore, by applying statistical computations like the ABC analysis method to categorize stock based on importance and sales, the store can prioritize more on profitable products and maintain ideal stock levels.

Discussion: I intend to speak with the owner, Mr. Sunil Darak, to gain qualitative insights into the challenges he encounters, his views on credit policies, and his margin preferences.

Benchmarking: I will compare 'Rani's Collection' with similar Garment stores in the market to uncover effective practices for setting margins and credit standards.

b. **Intended Data Collection :**

The planned data collection for managing inventory includes:

- i. **Sales records** : Total quantities of goods sold.
- ii. **Inventory details** : Estimates and values of all items purchased.
- iii. **Historical sales insights** : If the owner consents, past sales data will help analyze demand trends, seasonal shifts, and forecast future needs of purchases.

- This thorough data collection strategy will be key in measuring consumption trends, identifying top-selling items, and optimizing inventory levels.

Variables like Cost Price, Selling Price, Quantity Sold, and Quantity Bought offer essential data for calculating important financial metrics and ratios, enabling a thorough analysis.

c. **Analysis Tools :**

- i. Microsoft Excel: Excel will serve as the primary tool for the store's inventory

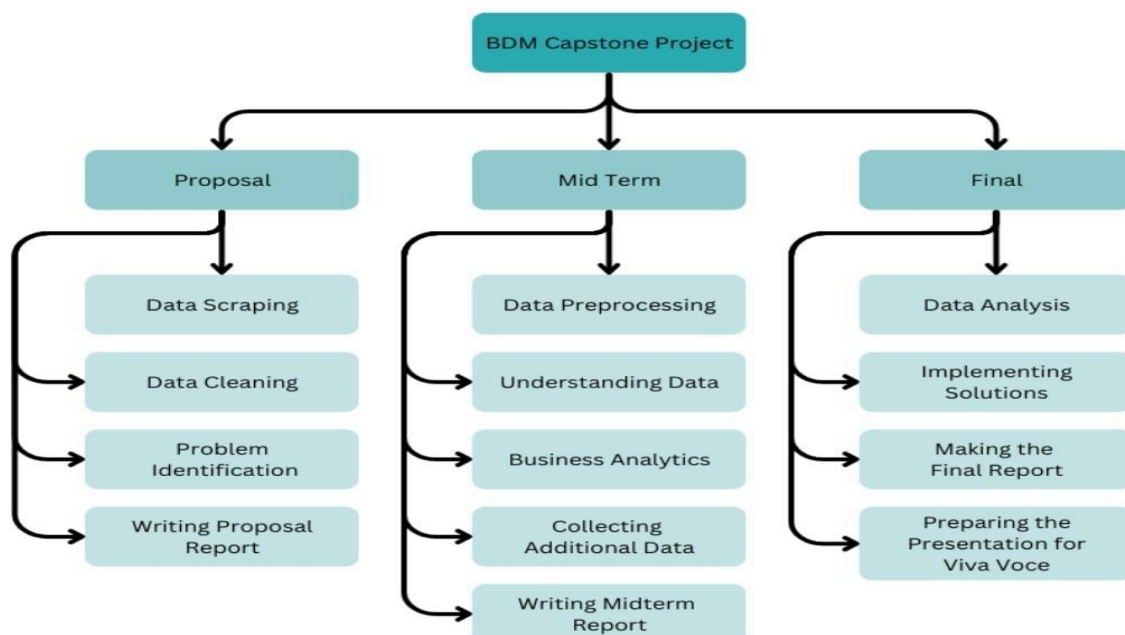
management, allowing efficient data entry, organization, and storage of inventory information. It enables flexible data handling, calculations, and the creation of tables to monitor stock levels and sales. Features like graphing and pivot tables help in visualizing consumption patterns and trends, making it easier to summarize and analyze data. Additionally, Pareto charts highlight key inventory products that impact sales, aiding in focused inventory management efforts.

ii. Python and Machine Learning (ML) Tools: Python, a highly adaptable programming language, includes libraries such as Pandas and NumPy that offer powerful data handling, processing, and statistical analysis functions. With Python, the store can work with large amounts of data, perform advanced calculations, create better visualizations with libraries like Matplotlib/Seaborn and uncover important insights from inventory data.

By integrating these methods, data collection practices, and analysis tools, the store will establish a solid inventory management system. This approach will enable data-driven decision-making, optimize stock levels, and effectively lower operational costs. Prioritizing accuracy and efficiency in inventory control will help ensure product availability, enhancing customer satisfaction and supporting the store's long-term success and profitability in a competitive market.

6 Expected Timeline

6.1 Work Breakdown Structure



6.2 Gantt chart

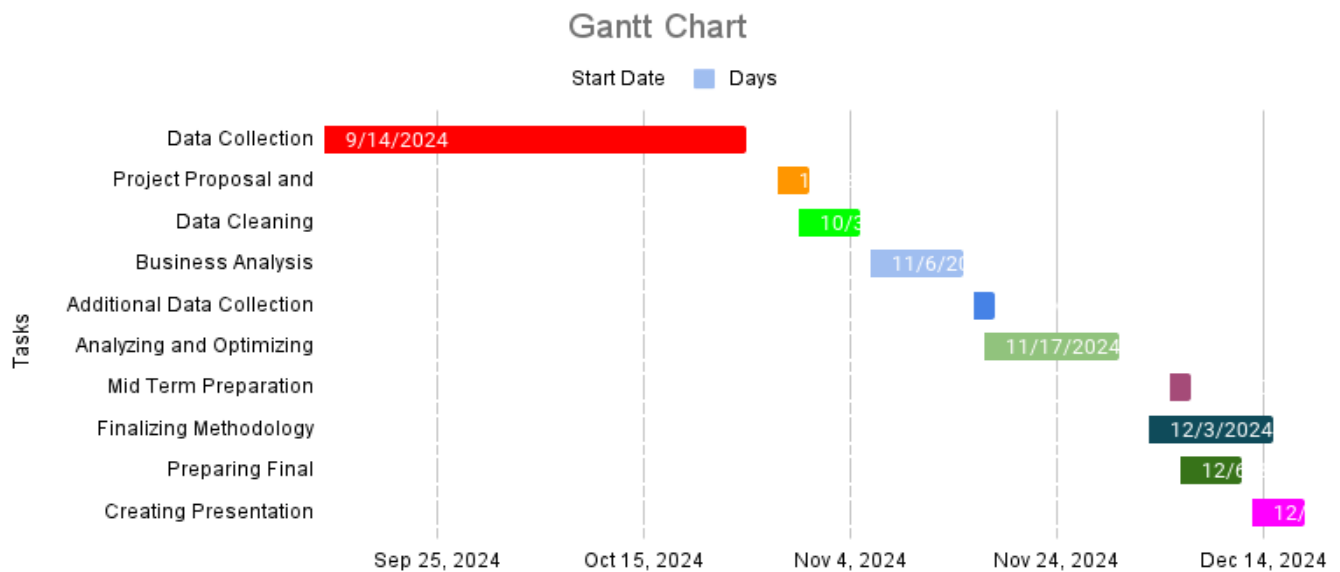


Figure 1 Expected timeline for completion of project.

7 Expected Outcome

- Establishing clear margins by developing a structured approach between the costs beared and sales of the product, informed by analyzing previous transactional data. This will support sustainable profit margins and help maintain financial stability.
- Implementing data-driven insights to track inventory and avoid stockouts, thereby improving the store's financial performance. Optimized stock levels will also lead to operational cost savings and a more efficient supply chain.
- Conduct an in-depth, data-driven review of costs, selling prices, and profits related to stock purchases. This will provide the business owner with a detailed overview of financial performance and assist in identifying areas for improvement.
- With consistent product availability, quality, and customer satisfaction, this project will position the store more competitively in the market, contributing to its long-term success.
- Use historical data to predict demand changes across seasons, allowing the store to adjust inventory levels accordingly. This ensures adequate stock during peak periods and minimizes excess during slower times.