

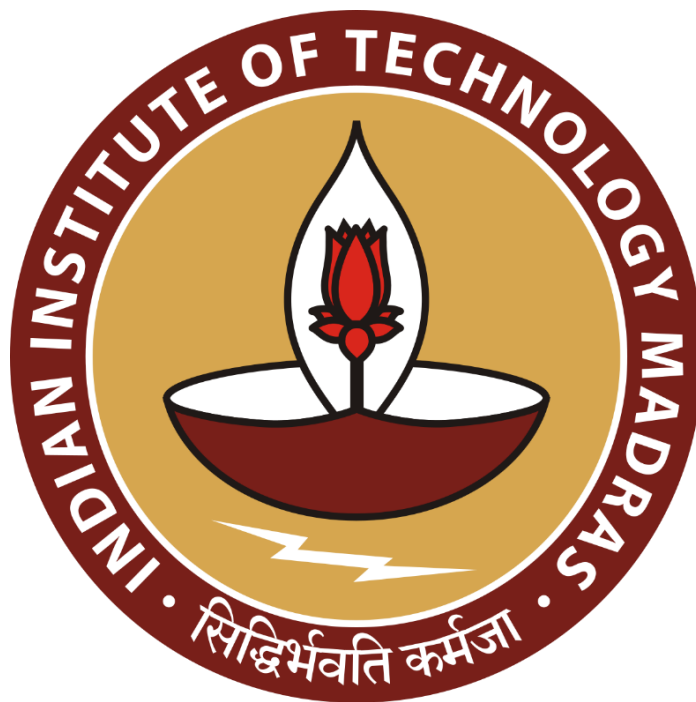
# **Enhancing Sales and Profit Maximization of Photocopy and Stationery Business**

## **A Mid-term report for the BDM Capstone Project**

Submitted by

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## **Executive Summary and Title:**

### **Enhancing Sales and Profit Maximization of Photocopy and Stationery Business**

The project focuses on a small business of steel furniture located at Muzaffarnagar (Uttar Pradesh) that works on copying documents and selling pens and pencils, notebooks, diaries, staplers, scissors etc. The business is B2C and deals the entire business running via offline mode only.

The major business issues that the organization is facing are related to the fluctuation in prices of the material purchased for sale. Fluctuations in paper and ink prices and other related materials can significantly impact the overall cost of the final goods. It should be carefully managed and forecast goods costs to maintain profitability and competitive pricing.

The issues will be addressed by analyzing the data via different analytical approaches to obtain a fruitful outcome. Regularly monitor raw material markets, economic indicators, industry trends to anticipate potential price fluctuations and also having a diverse supplier base allows businesses to compare prices, negotiate favorable terms, and switch suppliers if necessary.

One of the most important things that Balaji Photostat and Stationers can do to nurture sales is to build relationships with customers. This can be done by providing excellent customer service, offering loyalty programs. Another way is to offer a variety of products and services. This will give customers more options to choose from and make it more likely that they will find something that they like. They should also make sure that their products are high quality and durable.

Balaji Photostat and Stationers need to make sure that they are pricing their products competitively. This can be done by conducting market research and benchmarking prices against other businesses in the industry. Another way to optimize prices is to use dynamic pricing. This involves adjusting prices based on factors such as demand, inventory levels, and competitor pricing. Dynamic pricing can help businesses to maximize profits and sell more products.

The expected outcome of this study is to contribute to the business growth by identifying new target markets trends and achieve sustainable profitability by effectively managing costs, optimizing pricing strategies, and generating sufficient revenue to cover expenses and generate a reasonable return on investment.

## **Proof of Originality of Data:**

Letter from Organization:

**BALAJI PHOTOSTAT AND STATIONERS  
MUZAFFARNAGAR**

Date: - 12 Nov, 2023

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that I, Anuj Kumar Agarwal, the owner of Balaji Photostat and Stationers has provided two/three months of data to Mr. Manas for the purpose of an academic project in IIT Madras.

The data provided by me is true provided to my knowledge and this can be used for only academic purposes only.

*Anuj Kumar  
Agarwal*  
Proprietor

Contact: - 7454989168

E-mail: - aanujkumar789@gmail.com

Image related to Organization and image with Owner:





Photograph with Owner of organization:



## Metadata and Descriptive Statistics:

Metadata for a Balaji Photostat and Stationers contains the key details about the data I am collecting and analyzing. Metadata helps ensure that everyone understand the context, source, and structure of the data. The metadata for a photostat and stationery business are:

### Data Source:

- Data comes from the internal records of Balaji Photostat and Stationers.

### Date Range:

- Data spans from August 2023 to October 2023.

### Data Format:

- Data is stored in the Ledger (account and financial book).

### Variables:

1. **Product Data:** In this dataset we see product names, id, category, price of different models. Columns in the product data and its description given below:

- Product ID: Unique identifier for each product.
- Product Name: Name of the product.
- Price: Unit price for the product.
- Quantity Sold: Number of units sold.
- Purchasing Cost: Cost of purchasing each product.
- Profit Margin: Calculated as (Price - Production Cost).

Click the link to view the data: [Link](#)

2. **Sales Data:** Sales Data is about the sales that have happened in the business in each month. Columns in the sales data and its description given below:

- Order ID: Unique identifier for each sales order.
- Date: Date of the sale.
- Customer Name: Name of the customer.
- Product ID: Identifier for the product sold.
- Quantity: Quantity of the product sold.

Click the link to view the data: [Link](#)

3. **Supplier Data:** Supplier data is about that was supplied by the dealer in each month. Columns in the purchased data and its description given below:

- Supplier ID: Unique identifier for each supplier.
- Supplier Name: Name of the supplier.
- Material Cost: Cost of materials supplied.
- Delivery Date: Date of material delivery.

Click the link to view the data: [Link](#)

4. **Employee Data:** Employee data is the information about each of the employees working in the company. Columns in the employee data and its description given below:

- Employee ID: Unique identifier for each employee.
- Employee Name: Name of the employee.
- Position: Job title or position within the company.
- Hire Date: Date of employment.
- Salary: Monthly salary of the employee.

Click the link to view the data: [Link](#)

5. **Customer Data:** Customer data is the information about each of the customers who are continuously using our products. Columns in the customer data and its description given below:

- Customer ID: Unique identifier for each customer.
- Customer Name: Name of the customer.
- Location: Customer's location or address.
- Purchased Quantity: Quantity purchased by the customer.

NOTE: For privacy reasons, we have removed the contact information from the google sheet.

Click the link to view the data: [Link](#)

#### **Units of Measurement:**

- Monetary values are in INR (Indian Rupee).



- Quantity is measured in units (e.g., pieces).
- Dates are in the DD/MM/YYYY format.

### **Detailed Explanation of Analysis Process/Method:**

The analysis process/method of Balaji Photostat and Stationery is systematic approach to collecting, organizing, and interpreting data in order to gain insights into the business's performance and identify areas for improvement.

#### **Process/Method:**

The analysis process/method for their business can be divided into four main steps:

- **Data collection:** This involves gathering data from a variety of sources, such as financial records, sales data, customer surveys, and industry reports.
- **Data cleaning and preparation:** This involves checking the data for errors and inconsistencies, and formatting it in a way that is suitable for analysis.
- **Data analysis:** This involves using a variety of analytical techniques, such as descriptive statistics, inferential statistics, and machine learning, to extract insights from the data.
- **Reporting and recommendations:** This involves communicating the findings of the analysis to stakeholders and making recommendations for improvement.

#### **Justification for usage by Balaji Photostat and Stationers:**

The analysis process/method is essential for a business, but it is especially very important for photostat and stationery business, which operate in a competitive and dynamic environment. By regularly analyzing their data, Balaji Photostat and Stationers able to perform following steps:

- Identify trends and patterns in sales, customer behaviour, and industry conditions.
- Benchmark their performance against competitors.
- Assess the effectiveness of their marketing and sales strategies.
- Identify areas for cost reduction and efficiency improvement.
- Make informed decisions about product development, pricing, and market expansion.

#### **Example of how the analysis process/method is used in their business:**

- They use sales data to identify which products are the most popular and which products are not selling well. This information could then be used to make decisions about which products to continue selling, which products to discontinue, and which new products to introduce.

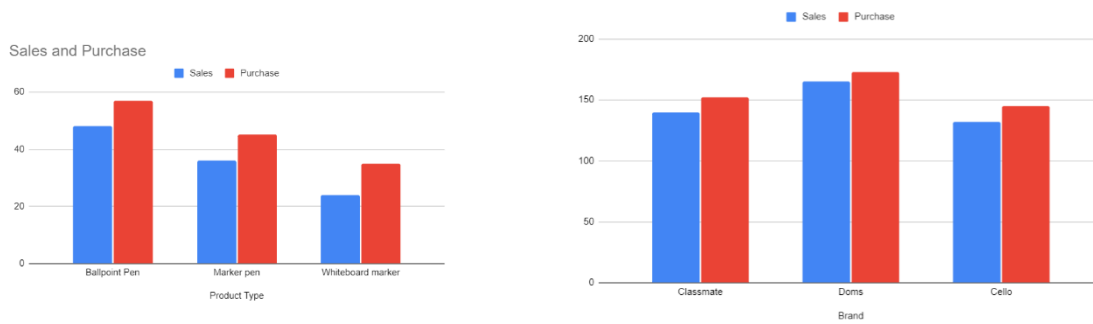
- They use customer survey data to identify areas where they can improve their customer service or product quality. This information could then be used to develop and implement improvement plans.
- They use industry data to track trends in demand and competition. This information could then be used to develop strategies for maintaining or increasing market share.

### Conclusion:

The analysis process/method is a powerful tool that Balaji Photostat and Stationers use to gain insights into their performance and identify areas for improvement. By regularly analyzing their data, they can make informed decisions that lead to success.

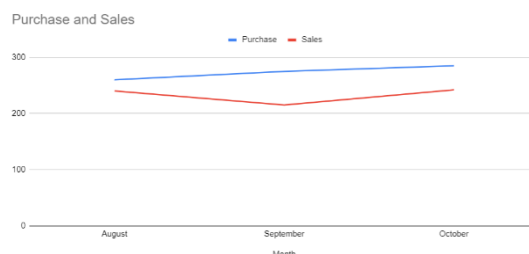
### Results and Findings:

The below graph shows the demands of types of pens and brands of products of the customer:



- With this graph, we can compare which type of pens and products of which brand are in demand.
- Through this graph we can clearly say that the ballpoint pen is most demandable and best while in various brands, Doms brand is in high demand.
- This graph helps to figure out, in which brands we need to invest more and plan its accordingly.

The below graph shows the comparison between sales and purchases in every month from August to October:



- With this graph we can see that the sales are increasing while increasing the purchase of the variety of materials from August to October.

- By this graph, we can clearly see that if the owner increases the purchase rate of the material, they will provide better customer satisfaction as customer can have large number of varieties of product to choose the best one.
- From the analysis, we can increase purchase in August to increase the profit.

After a careful analysis of data, Balaji Photostat and Stationers can gain the following results and findings:

- Sales trends: The business may identify trends in sales, such as which products are not selling more, which products are selling more as per demand, and which products are losing or gaining popularity. This information can be used to make decisions about product pricing, and marketing.
- Customer behaviour: The business may identify patterns in customer behaviour, such as which products customers are buying together and which products they are most satisfied with. This information can be used to improve the customer experience and develop more effective marketing business.
- Industry trends: The business may identify trends in the stationery business, such as changes in demand, competition, and pricing. This information can be used to develop strategies for maintaining or increasing market opportunities.
- Cost reduction: The business may identify opportunities to reduce costs, such as by negotiating better deals with suppliers, or reducing dead stock. This information can be used to improve profitability.