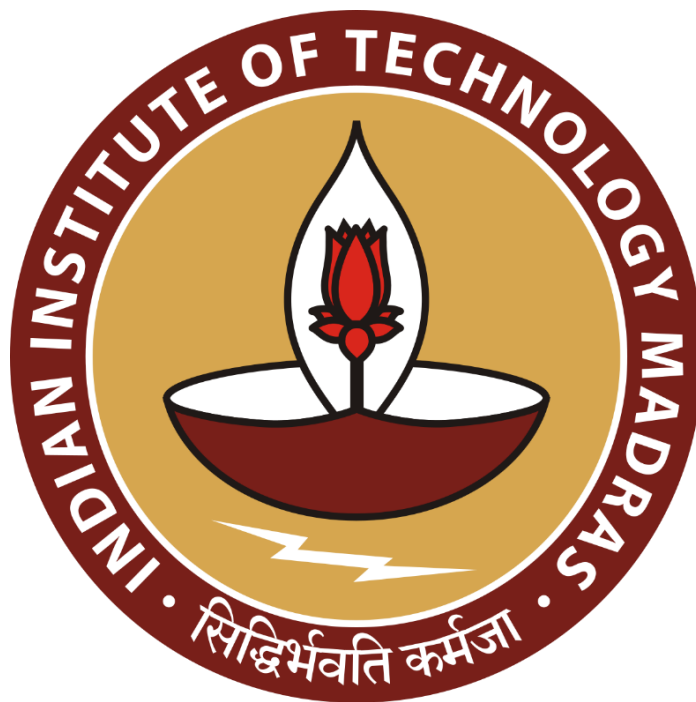# Enhancing Sales and Profit Maximization of Photocopy and Stationery Business

A Final report for the BDM Capstone Project

Submitted by

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Contents:

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 thatworks 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 willgive 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.

Proprietor

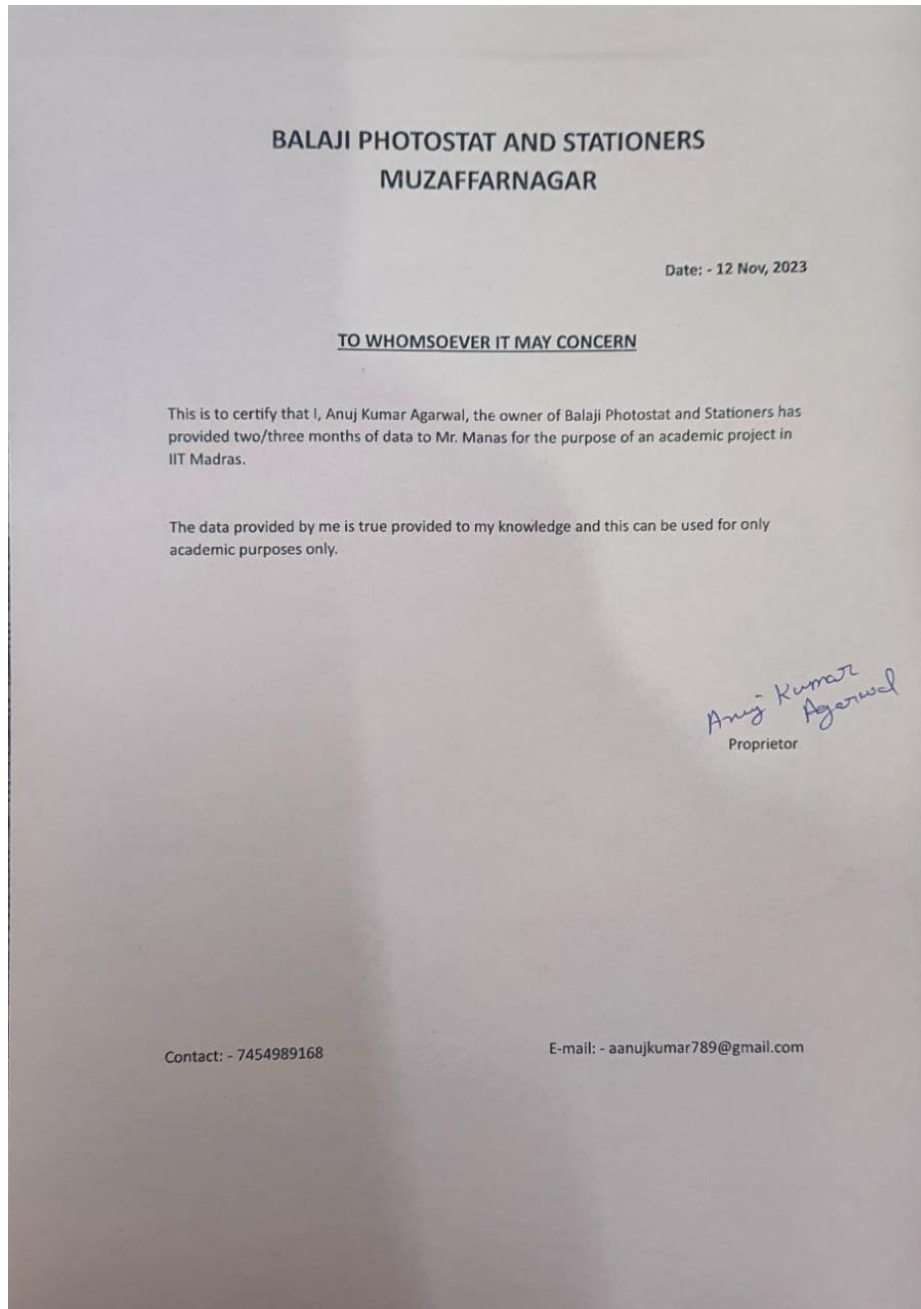Contact: - 7454989168

E-mail: - aanujkumar789@gmail.com

Image related to Organization and image with Owner:

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.

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.
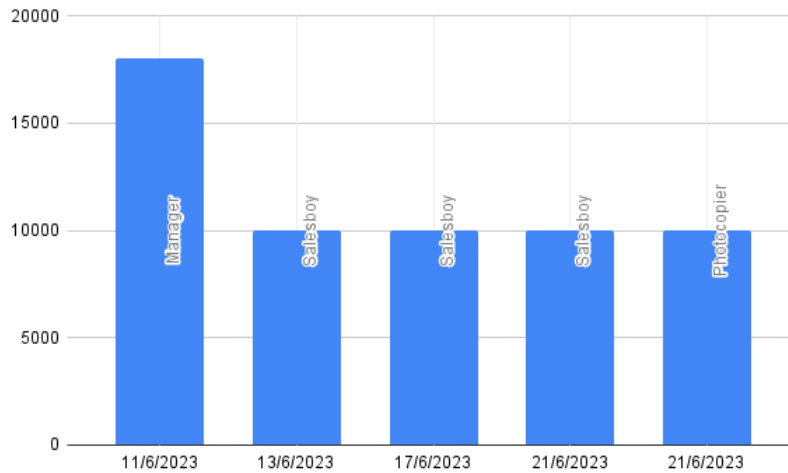
    Click the link to view the data: **Link**

Figure 1

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.

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:

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- 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:
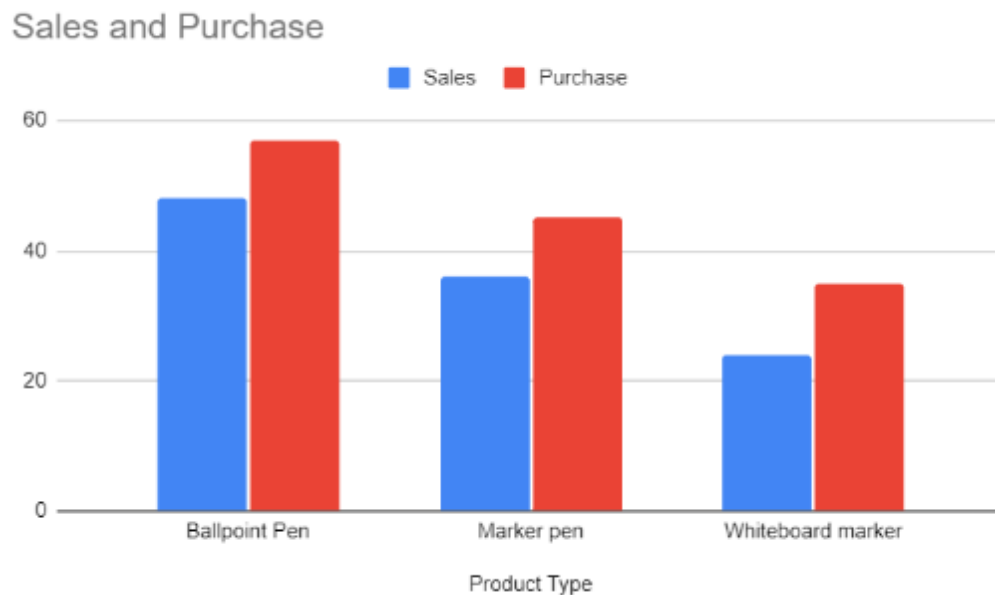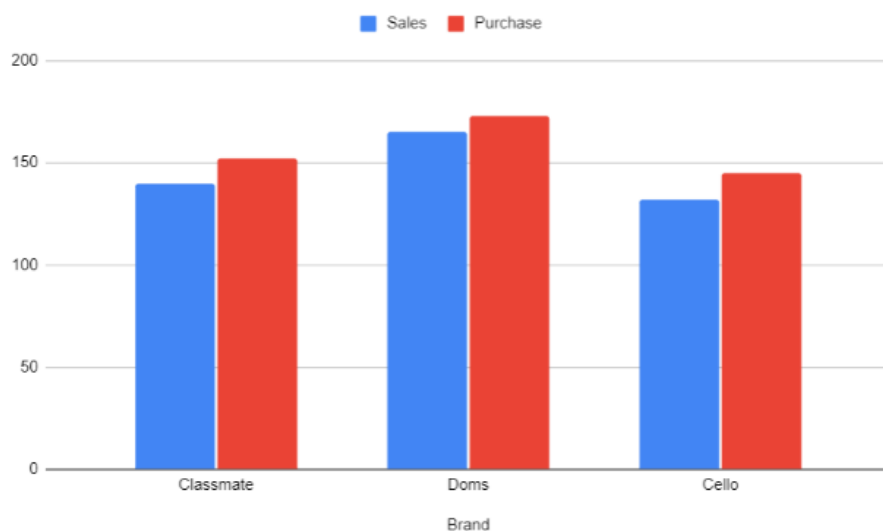

Figure 2

Figure 3

- 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 itsaccordingly.

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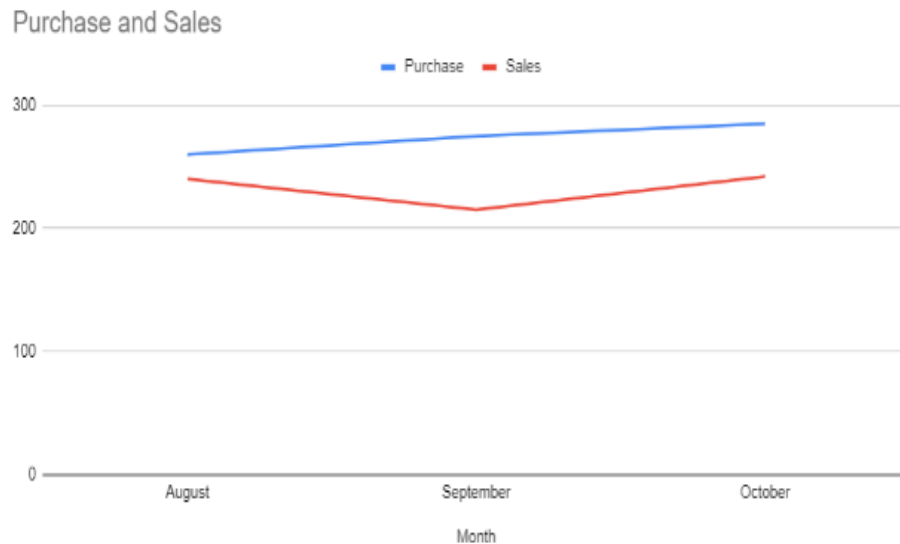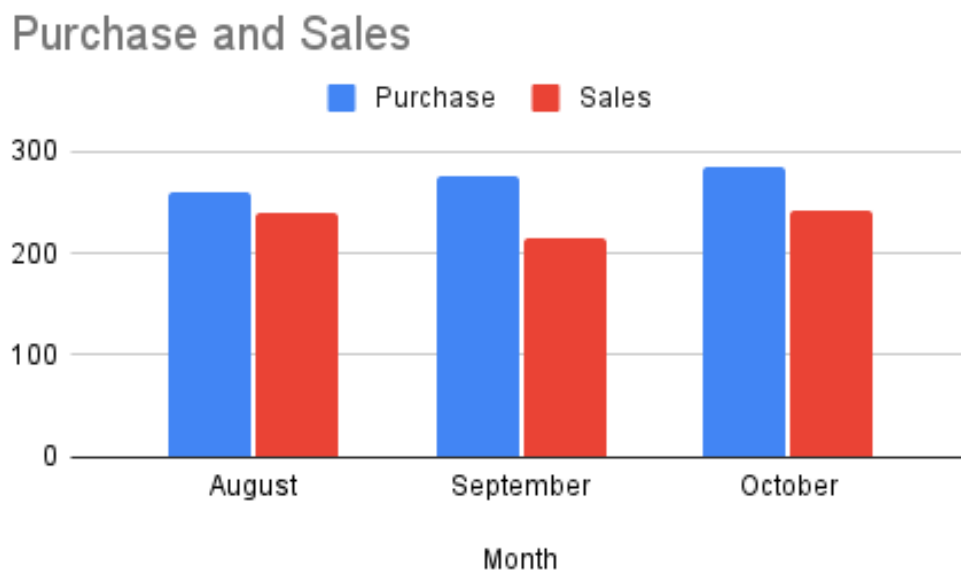

Figure 4

Figure 5

- 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.

The graph below represents the location of customers visiting the store for purchases:

Count of Location

Ramghat
3.5%
Ansari Road
10.4%

Roorkee Road
0.9%
Rampuri
19.1%

Anandpuri
19.1%

Ghas Mandi
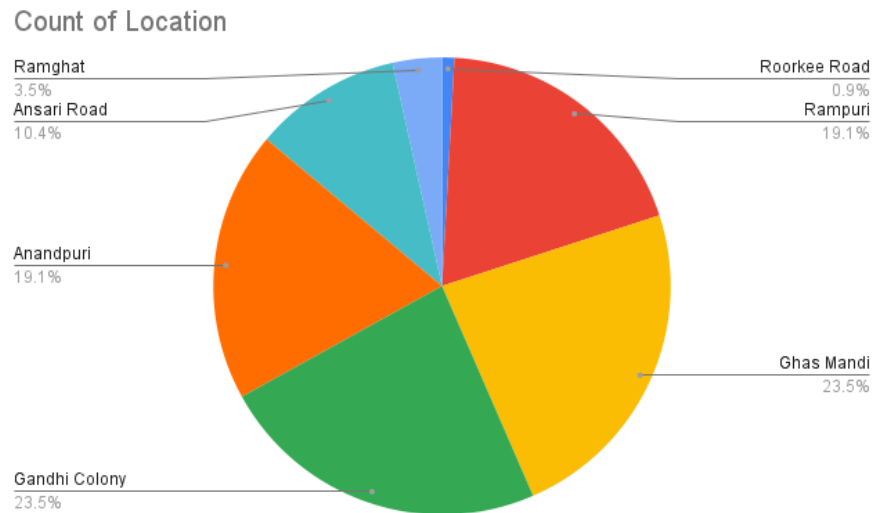23.5%

Gandhi Colony
23.5%

Figure 6

The above graph presents a breakdown of the percentage revenue generated from each locality during the period of 3 months. Notably, Ghas Mandi, where the business is situated, accounted for 23.5% of the total revenue, followed by Gandhi Colony, another neighboring locality. This data portrays the local roots of the business.

The above graph also represents the areas like Roorkee Road, Ramghat and Ansari Road where customer footfall is less compared to the other areas of strong hold. In here, some serious marketing strategy needs to be devised for the consumers to be able to know of the presence of the business.

The below graph represents the popular brands available for sale at the business:
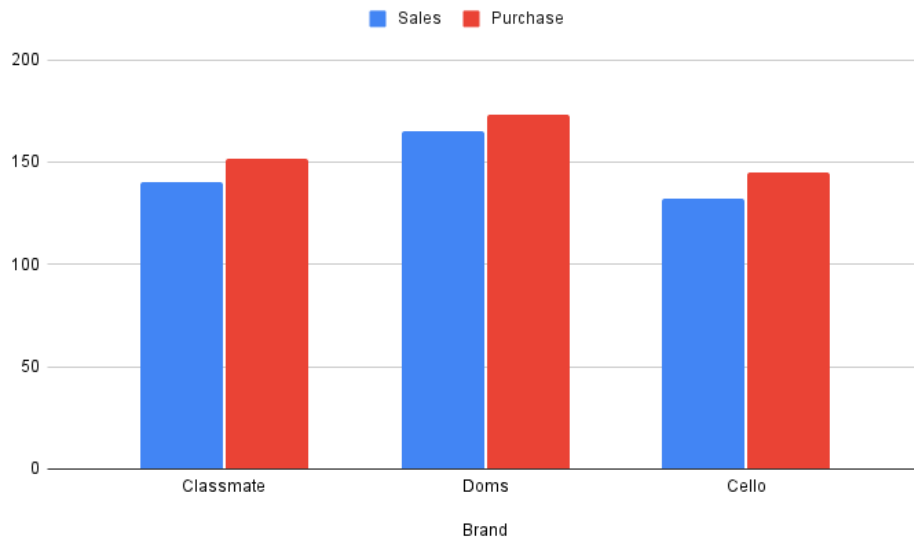
Popular Brands(Sales)

Figure 7

The above bar-graph represents the various popular brands that have partnered with the business for sale in the region. This represents the importance of strategic location where the business is situated so as to increase the presence of the brands in the region.

As we can observe, Doms is leading the brand presence in the business. Classmate is also trying to catchup the brand race in the area followed by Cello.

The below graph represents the materials purchased from different suppliers:

Material purchase Cost

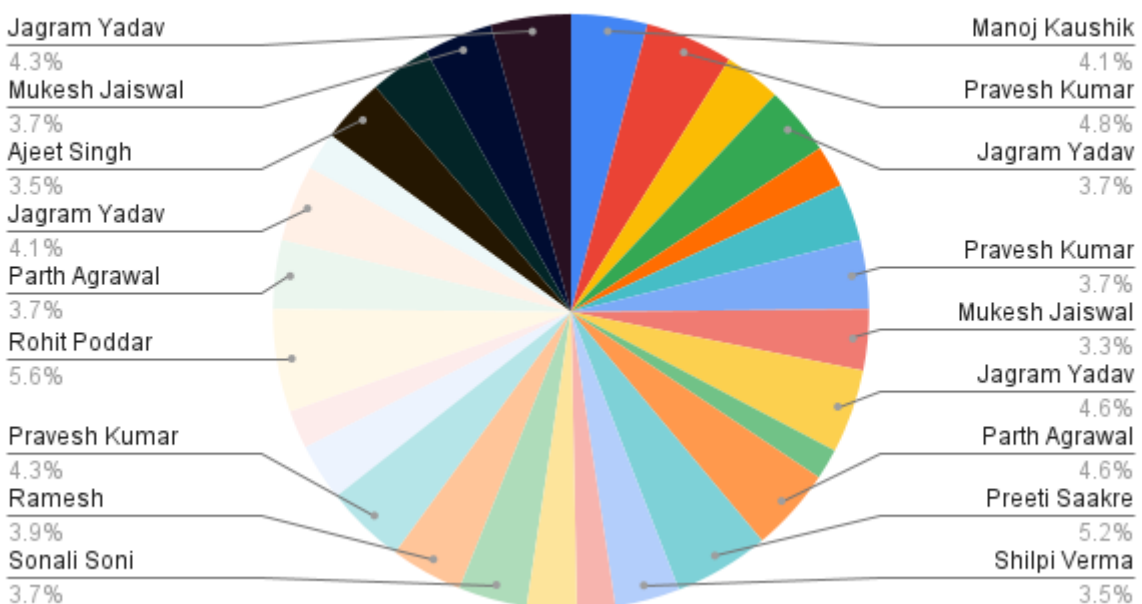| Supplier	Percentage
Jagram Yadav	4.3%
Mukesh Jaiswal	3.7%
Ajeet Singh	3.5%
Jagram Yadav	4.1%
Parth Agrawal	3.7%
Rohit Poddar	5.6%
Pravesh Kumar	4.3%
Ramesh	3.9%
Sonali Soni	3.7%
Manoj Kaushik	4.1%
Pravesh Kumar	4.8%
Jagram Yadav	3.7%
Pravesh Kumar	3.7%
Mukesh Jaiswal	3.3%
Jagram Yadav	4.6%
Parth Agrawal	4.6%
Preeti Saakre	5.2%
Shilpi Verma	3.5%

Figure 7

The above pie-chart represents the different registered suppliers from which the purchases have been made by the owner for further sales. This pie-chart emphasizes the importance of different dealers for the procurement of different products in the business of photocopy and stationery.
In here, Rohit Poddar and Preeti Saakre are among the top suppliers with 5.6% and 5.2% respectively. This data helps the owner for the betterment of relationships with the suppliers of the products and materials.

The below graph represents the most popular products the business offers to its consumers:
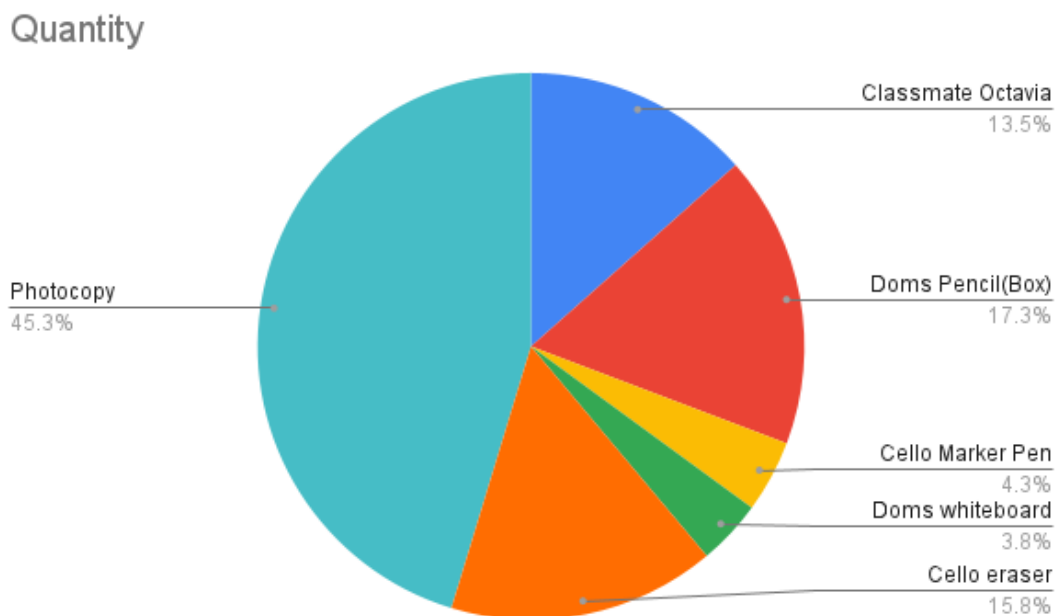

Figure 8

The above pie-chart represents the best-selling products of the business. It gives an insight to the business what type of products will be successful in the market.
As in here, photocopy constitutes of 45.3% of the sales of the business. Apart from that, pencils (as Doms) and erasers (as Cello) consists of 17.3% and 15.8% share respectively.

The below graphs represent the products purchased by the owner for their increased sales:
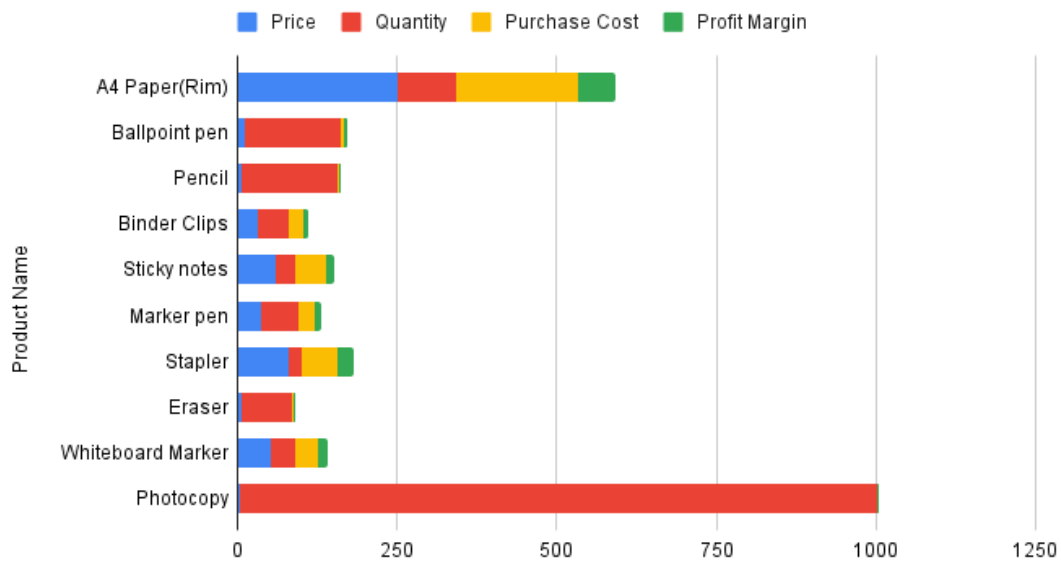
Figure 9

The above stacked bar chart represents the different types of products obtained by the owner with the help of suppliers in the month of August, September and October 2023.
This contains the details as price of each product with the quantity purchased and profit margin on each product which helps to determine which products give better yield with low investments.

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.

Cost analysis revealed a slight increase in operating expenses due to rising rental costs and raw material prices.

Market Share:
Balaji Photostat and Stationers maintained a steady market share despite increasing competition from online printing services.
Strategies such as personalized customer service and quick turnaround times helped retain loyal customers.

Customer Satisfaction:
Key drivers of customer satisfaction identified as service quality, product variety, and convenience of location.

Interpretations of results and recommendations:

Based on the analysis conducted, the following interpretations and recommendations are provided:

Sales Performance:
The bar graph indicates a fluctuating trend in sales over the past year. It is essential to identify the underlying factors contributing to these fluctuations and take corrective measures accordingly. This may involve adjusting pricing strategies, enhancing marketing efforts, or diversifying product offerings.

Competitive Analysis:
The comparison chart reveals that Balaji Photostat and Stationers lag behind competitors in certain key areas, such as customer satisfaction or product innovation. To address this gap, the business should focus on improving customer service, investing in technology upgrades, and exploring new market segments.

SWOT Analysis:
The SWOT analysis highlights several strengths of Balaji Photostat and Stationers, such as a loyal customer base and strategic location. However, weaknesses such as limited product range and reliance on traditional advertising methods need to be addressed. Opportunities such as expanding online presence and diversifying into related services should be explored, while potential threats such as increasing competition and economic downturns need to be monitored closely.

Financial Performance:
Interpretation: The increase in sales revenue signifies growing demand for printing services, presenting opportunities for expansion into related service offerings.
Recommendation: Explore diversification into digital printing services and document management solutions to capitalize on emerging market trends.

Market Share:
Interpretation: Maintaining a steady market share amidst increasing competition underscores the effectiveness of customer-centric strategies.
Recommendation: Continue investing in personalized customer service and implement loyalty programs to incentivize repeat business.

Customer Satisfaction:
Interpretation: High Net Promoter Score (NPS) indicates strong customer loyalty and satisfaction levels.
Recommendation: Focus on continuous improvement in service quality, product range expansion, and enhancing the overall customer experience to sustain competitive advantage.

Based on these interpretations, the following **recommendations** are provided:

Diversification: Expand product offerings to include complementary services such as printing services, office supplies, or digital solutions.

Enhanced Marketing: Invest in digital marketing strategies to reach a wider audience and improve brand visibility.

Customer Experience: Focus on improving customer service and enhancing the overall shopping experience to increase customer loyalty and retention.

Technology Integration: Embrace technology upgrades such as online ordering systems or digital payment options to streamline operations and improve efficiency.

Presentation and Legibility of the Report:

The final submission report for the BDM capstone project has been crafted to provide a comprehensive understanding of the context of general revenue and profit. The graphical representations of the data are accompanied by detailed explanations, making it easier for readers to comprehend the information presented.

The report is presented in a clear and organized manner, with each section addressing specific aspects of the analysis process and findings. Grammar and spelling are meticulously checked to ensure clarity and professionalism.

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