



# **BDM Capstone Project**

Mid Term Submission

## **Title:**

Revitalizing Revenue:  
Data-Driven Strategies for stable growth in a  
Small-Town Stationery Business.

Submitted by:

Parul Purwar

22ds2000030

## Executive Summary:

During this phase of the submission, I have completed an analysis of three years' worth of revenue and growth data for Sanwariya Seth Stationary, owned by Mr. Rahul, located in Rath Hamirpur. The initial step involved collecting the data, which was provided to me in Tally format. To simplify the process, I took the initiative to convert it into an Excel sheet, utilizing separate sheets to showcase various statistical aspects using "Tally Prime."

The project focuses on analysing three years of revenue and growth data from Sanwariya Seth Stationary, a retail and wholesale stationary business in the town of Rath, Hamirpur district. The goal is to identify the root causes of revenue instability and provide valuable suggestions for improvement and scalability. The business operates in both B2B and B2C sectors through retail and wholesale channels, and it also utilizes online platforms like Amazon and Flipkart to offset revenue loss.

To streamline the data collection, I focused on extracting the crucial and relevant components that could assist me in my analysis. Currently, I am deeply engrossed in meticulously analysing the gathered data. The software assisted with fundamental calculations such as balance sheets, ratios, and other parameters. However, as I was unfamiliar with tally data, this phase took a few days to navigate.

With Microsoft Excel as my tool of choice, I am diligently studying the data to gain a comprehensive understanding and identify the key factors impacting the business. My primary objective is to uncover valuable insights into the company's performance over the past three years and evaluate its market position.

For instance, during the period from 1st April 2020 to 25th March 2023, the inventory turnover ratio was calculated to be 1.06. This figure suggests that Sanwariya Seth Stationary efficiently managed its inventory, striking a healthy balance between inventory levels and sales volume. It also indicates that the company successfully sold and replenished its inventory slightly more than once a year. Additionally, the business owner confirmed that they encountered no significant issues with inventory management.

By conducting a meticulous analysis of the data, I aim to develop actionable recommendations that will enhance revenue, promote stability, and contribute to the business's growth trajectory.



## Proof of Originality of Data:

### Letter from the Organisation:

**Rahul Purwar** <rahsar3@gm...> 6 May 2023, 11:44 ☆ ↶

to me ▼


rahul

----- Forwarded message -----

From: **ca rath** <gstrath7001@gmail.com>  
Date: Sat, 6 May 2023, 11:24  
Subject: SANWARIYA SETH KISORI LAL AND SONS  
To: <rahsar3@gmail.com>

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**One attachment** • Scanned by Gmail ⓘ



10000.zip

**Rahul Purwar** <rahs...> Fri, 7 Jul, 20:40 (10 hours ago) ☆ ↶ ⋮

to me ▼

Subject: Request for Business Data for IIT Madras's Business Data Management Capstone Project

Dear Parul,

As per your request, I am delighted to offer my business data for last three years in tally format to assist you in your analysis for the project. In my business, I specialize in providing a wide range of stationary products and services. Sharing our data with you will contribute valuable insights to your research and I too will get some detailed understanding about my business's performance.

The discussion that we had in last few meetings seemed meaningful to me and I am excited to look at the analysis report. I believe that this collaboration will be mutually beneficial. If you have any queries or require further assistance, please do not hesitate to contact me.

Wishing you the best for your project.

Best Regards,  
Rahul Purwar  
Sanwariya Seth Stationer's  
Rath, Hamirpur

## Metadata:

### Shop Information:

Field	Details
Shop Name	Sanwariya Seth Stationary
Address	Near Bada Mandir, Rath district Hamirpur
Contact	9415808897, 7007343900
Email	rahsar3@gmail.com
Operating Hours	All days except Wednesdays, 9:00 AM to 8:00 PM
Description	Sanwariya Seth Stationary is a one-stop shop for all your stationary needs. They offer a wide range of high-quality paper products, office supplies, art materials, and writing instruments. Additionally, they operate as a wholesale distributor for books.

### Product Categories (Retail - Stationary):

Category	Items
Paper Products	<ul style="list-style-type: none"><li>• Notebooks</li><li>• Notepads</li><li>• Journals</li><li>• Sketchbooks</li><li>• Sticky notes</li><li>• Subjective Books</li></ul>
Office Supplies	<ul style="list-style-type: none"><li>• Pens and pencils</li><li>• Staplers and staples</li><li>• Scissors</li><li>• File folders</li><li>• Paper clips</li><li>• Highlighter</li><li>• Calculator</li><li>• Diaries</li></ul>
Art Materials	<ul style="list-style-type: none"><li>• Paints (acrylic, watercolour, oil)</li><li>• Brushes</li><li>• Canvases</li><li>• Sketching pencils</li><li>• Pastels</li><li>• Glue</li><li>• Decorative papers</li></ul>
Writing Instruments	<ul style="list-style-type: none"><li>• Ballpoint pens</li><li>• Rollerball pens</li><li>• Fountain pens</li><li>• Mechanical pencils</li><li>• Markers</li></ul>

	<b>Brands</b>	
Apsara	Camlin	Freemind
Hauser	Luxor	Osprey
Pidlite	Rorito	Taj White
Linc	Youva	Unomax
Ultron	Stellar	Schoolmate
Reynolds	Kharya	Kangaroo
Benelux	Artline	APS
Classmate	Parker	NAT
Flair		

**Product Categories (Wholesale - Books):**

<b>Brands</b>	<b>Classes</b>
<b>Arihant</b>	XII (12th)
<b>Brilliant Bubbles</b>	III (3rd) - V (5th), XI (11th)
<b>Build Up Your Brain</b>	1 (1st) - 8 (8th)
<b>Cap</b>	Aaroh (XI), First Flight (X), Hornbill (XI)
<b>CBSE One for All</b>	10 (10th)
<b>Exam Idea</b>	English (XII), Hindi (XII), Maths (XII)
<b>Ganit</b>	6 (6th), 7 (7th), 8 (8th), 10 (10th)
<b>Grih Vigyan</b>	6 (6th), 7 (7th), 8 (8th)
<b>HCV (HC Verma)</b>	11 (11th), 12 (12th)
<b>Kshitij</b>	9 (9th), XI (11th)
<b>Lucent</b>	Navodaya Guide (VI), General English, General Knowledge, Samanya Hindi
<b>Dhan</b>	11 (11th), 12 (12th)
<b>Indian Economic Development</b>	XI (11th), XII (12th)
<b>Manohar</b>	10 (10th), 11 (11th)
<b>Physics (H.C. Verma)</b>	XI (11th), XII (12th)
<b>Snapshot</b>	11 (11th)
<b>Vistas</b>	XII (12th)
<b>Vyakaran</b>	6 (6th), 7 (7th), 8 (8th)

**Services:**

- Retail: Stationary
- Wholesale: Books supply

### Accepted Payment Methods:

- Cash
- UPI Payments

### Descriptive Statistics:

Descriptive Statistics	Amount (INR)	Summary
Working Capital	₹16,94,746.37 (Dr)	Working capital deficit indicating that current liabilities exceed current assets.
Cash-in-hand	₹96,67,724.65 (Dr)	Negative cash balance requiring additional cash or reduced cash outflows.
Bank Accounts	₹1,26,26,607.55 (Cr)	Positive bank balance indicating available funds in bank accounts.
Sundry Debtors	₹6,04,676.08 (Dr)	Outstanding receivables owed by customers.
Sundry Creditors	₹15,33,344.74 (Cr)	Outstanding payables owed to suppliers.
Sales Accounts	₹56,13,899.77 (Cr)	Total sales generated.
Purchase Accounts	₹71,83,896.79 (Dr)	Total purchases made.
Stock-in-hand	₹53,16,719.44 (Dr)	Value of unsold stock.
Nett Profit	₹8,29,875.90 (Cr)	Net profit earned.

Ratios	Value	Summary
Working Capital Turnover	3.31	Sales are 3.31 times the working capital, indicating efficient utilization of working capital.
Inventory Turnover	1.06	Sales are 1.06 times the value of closing stock, indicating the frequency of inventory turnover.
Current Ratio	2.34: 1	Current assets are 2.34 times current liabilities, indicating a relatively healthy liquidity position.
Quick Ratio	1.86: 1	Quick assets (current assets excluding stock) are 1.86 times current liabilities, indicating the ability to cover short-term obligations.
Debt/Equity Ratio	0.00: 1	No long-term debt in relation to equity and net profit,

		implying a favourable debt position.
<b>Gross Profit %</b>	15.00%	Gross profit as a percentage of sales revenue.
<b>Nett Profit %</b>	14.78%	Net profit as a percentage of sales revenue.
<b>Operating Cost %</b>	85.22%	Operating costs account for 85.22% of sales revenue.
<b>Receivables Turnover (days)</b>	379.95 days	Average time taken by debtors to make payments.
<b>Return on Investment %</b>	100.00%	Net profit is equal to the investment (capital account + net profit), resulting in a 100% return on investment.
<b>Return on Working Capital %</b>	48.97%	Net profit is 48.97% of the working capital, reflecting the profitability generated by the working capital.

## Explanation of Analysis Process/Method:

I began by collecting the data in Tally format and then took the initiative to convert it into an Excel sheet. Utilizing Tally Prime, I extracted crucial information about the business, including balance sheets, funds flow and cash flow statements, sales data, stock summary, negative stock, quarterly and yearly sales figures, and other relevant statistics.

Next, I took the time to understand the Excel data and verified the qualitative information provided by the owner with the quantitative data. This step ensured the accuracy and reliability of the data I was working with.

To analyze the data more effectively, I created a new Excel workbook dedicated to exploring trends and patterns. I separated the wholesale channel (book data) and the retail channel (stationary data) into separate sheets to focus on each channel individually.

One important aspect I examined was the sales rate for each product, which helped me understand the balance between demand and supply. I calculated the sales rate and utilized colour scales to visualize this information, providing a clear understanding of the products' performance.

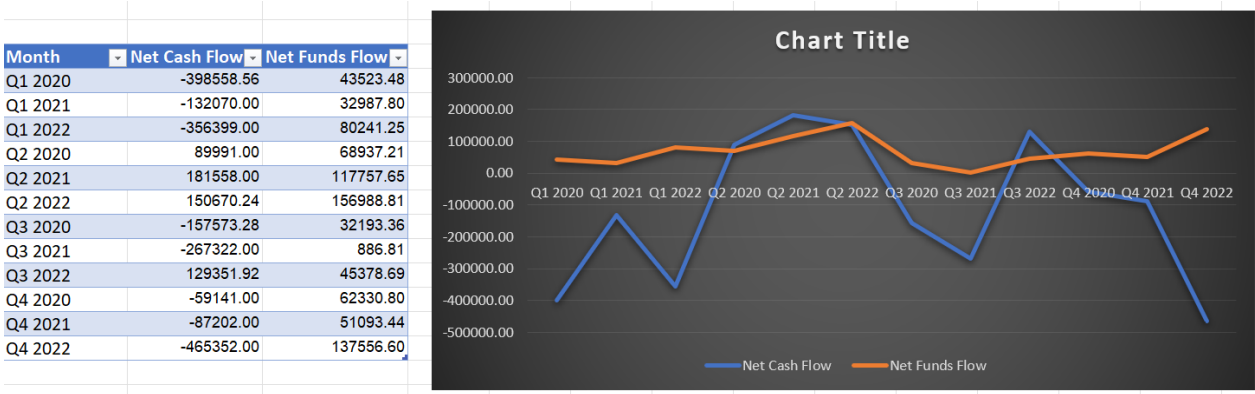
To gain insights into sales performance, I created a separate worksheet to analyze sales data both as a total and for each individual year. To make the analysis more visually appealing, I represented the sales data using bar charts, enabling me to identify trends and patterns easily.

I also focused on analysing the cash flow and funds flow by combining net cash flow and net funds flow data. I organized this information in a table, representing the values for each quarter over the three-year period. This analysis helped me evaluate the business's financial health and identify months with better cash flow and funds flow.

I am currently working to extract more information about data trends and identify products that can potentially solve the business problem. By analysing the data further, I aim to uncover insights and recommendations to address revenue instability and promote business growth.

Results and Findings:

Financial Flow Analysis:



Seasonal Cash Flow Variations: The data reveals clear seasonal patterns in net cash flow, with higher inflows during Q2 of each year. This suggests a potential correlation with seasonal factors or increased business activity during those months.

Negative Cash Flow Challenges: Several quarters, such as Q1 and Q4 in different years, exhibit negative net cash flow. Addressing the causes behind these periods of cash outflow is crucial to improve financial stability and liquidity.

Consistent Positive Net Funds Flow: Despite fluctuations in net cash flow, the analysis shows consistent positive net funds flow throughout the three-year period. This indicates a steady accumulation of funds, providing opportunities for long-term business growth and investment.

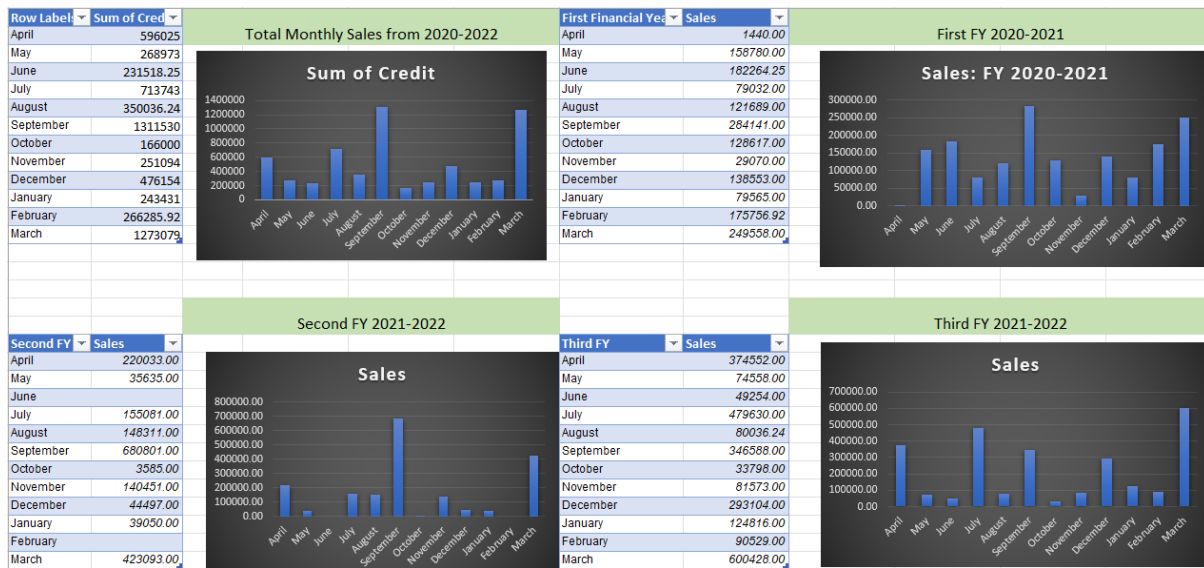
Sales Analysis:

1. Overall Sales Summary:

Total Sales for Three Years: The total sales over the three-year period amount to INR 6147869.41.

Monthly Sales Variation: Sales show fluctuations throughout the year, with higher sales observed in September (INR 1,311,530) and March (INR 1,273,079).





## 2. First Financial Year Sales (April to March):

**Increasing Sales Trend:** Sales show a general upward trend throughout the year, with the highest sales achieved in September (INR 284,141).

**Strong Finish:** The last quarter (January to March) demonstrates significant sales growth, with March recording INR 249,558 in sales.

## 3. Second Financial Year Sales (April to March):

**Varying Monthly Sales:** Sales fluctuate across the months, with notable peaks in September (INR 680,801) and March (INR 423,093).

**Sales Growth in Q2:** The Second quarter (July to September) stands out with substantial sales growth.

## 4. Third Financial Year Sales (April to March):

**Mixed Monthly Sales:** Sales vary across the months, with notable peaks in April (INR 374,552), July (INR 479,630), and March (INR 600,428).

January shows a significant increase in sales compared to previous years, with INR 124,816. September shows a significant decrease in sales compared to previous years.

## Summary and Next Steps:

Through ongoing analysis and a strong collaborative partnership with the owner, the project is progressing smoothly. Initial findings have been attached, showcasing the diligent analysis conducted thus far. The analysis process remains active, with a focus on uncovering valuable insights to drive improvements and growth for Sanwariya Seth Stationary.