



# Business Data Management Capstone Project

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## Analyzing the overall performance of Paper Tiger Stationery shop to increase profitability

### Executive Summary

Paper Tiger stationery shop is a B2C business that deals with almost all kinds of stationery items. After meeting with the business owner, he told me that tough competition is being faced by them, with their rival. The business is being operated on low revenue to increase customer footfall and compete with their rival. Their current profit margin is 25% approx. The owner of the shop wants to gain some insights on how to maximize their profit and reduce the monthly expenses of the shop.

### Detailed Explanation of Analysis Process/Method

After entering the raw data, a new worksheet has been created and the sales data has been copied into the worksheet for creating charts. The Revenue Pareto per item has been created for each month, to analyze what items are sold most or what items are sold less on each month. The data is shown in the figure Fig1.

Item	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
A4 Page	₹ 7,800	₹ 8,300	₹ 8,100	₹ 8,700	₹ 9,100	₹ 9,700
Calculator	₹ 2,600	₹ 2,400	₹ 2,100	₹ 2,790	₹ 2,800	₹ 3,250
Calendar	₹ 2,000	₹ 1,200	₹ 600	₹ 400	₹ 400	₹ 0
Colors	₹ 2,550	₹ 3,100	₹ 2,900	₹ 2,670	₹ 3,200	₹ 3,800
Diary	₹ 1,790	₹ 2,035	₹ 1,650	₹ 1,480	₹ 1,900	₹ 2,100
Dictionary	₹ 1,200	₹ 1,600	₹ 1,400	₹ 1,900	₹ 1,650	₹ 1,870
Books	₹ 12,000	₹ 43,000	₹ 34,000	₹ 11,000	₹ 46,000	₹ 52,000
Exam Pad	₹ 750	₹ 1,750	₹ 1,300	₹ 850	₹ 450	₹ 360
File	₹ 3,500	₹ 4,000	₹ 3,850	₹ 5,200	₹ 4,100	₹ 4,500
Geometry Box	₹ 1,400	₹ 1,600	₹ 1,230	₹ 900	₹ 1,800	₹ 2,300
Guides	₹ 12,230	₹ 7,000	₹ 6,500	₹ 17,000	₹ 1,700	₹ 3,600

Lunch Box, Water Bottle	₹ 2,400	₹ 5,800	₹ 4,800	₹ 1,200	₹ 6,300	₹ 7,200
Misc	₹ 28,000	₹ 36,800	₹ 21,300	₹ 26,000	₹ 39,500	₹ 43,600
Notebook	₹ 8,100	₹ 18,000	₹ 22,790	₹ 12,500	₹ 26,200	₹ 37,000
Pen	₹ 20,700	₹ 15,500	₹ 14,400	₹ 13,000	₹ 19,050	₹ 21,500
Pencil, Eraser, Sharpener, Scale	₹ 4,400	₹ 7,300	₹ 6,500	₹ 3,700	₹ 8,200	₹ 8,500
Rough	₹ 19,945	₹ 28,000	₹ 26,000	₹ 18,600	₹ 21,000	₹ 21,500

Fig1: Monthly Revenue per item

On another worksheet, the 'Month' and 'Revenue' columns have been created and the sales across all the items have been summed up for each month. The Monthly Revenue Pareto has been created, to analyze on which month the sales are less or high. The data is shown in the figure Fig2.

Month	Revenue
Feb-22	₹ 131,365
Mar-22	₹ 187,385
Apr-22	₹ 159,420
May-22	₹ 127,890
Jun-22	₹ 193,350
Jul-22	₹ 222,780

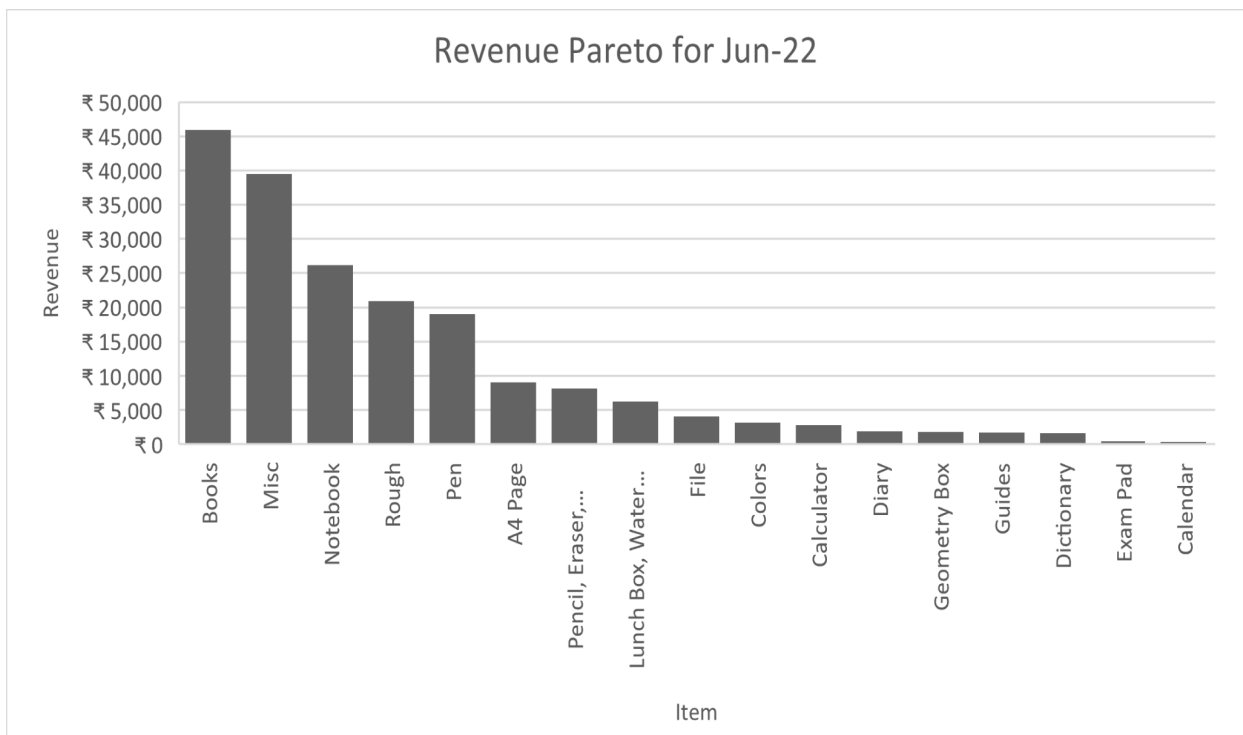
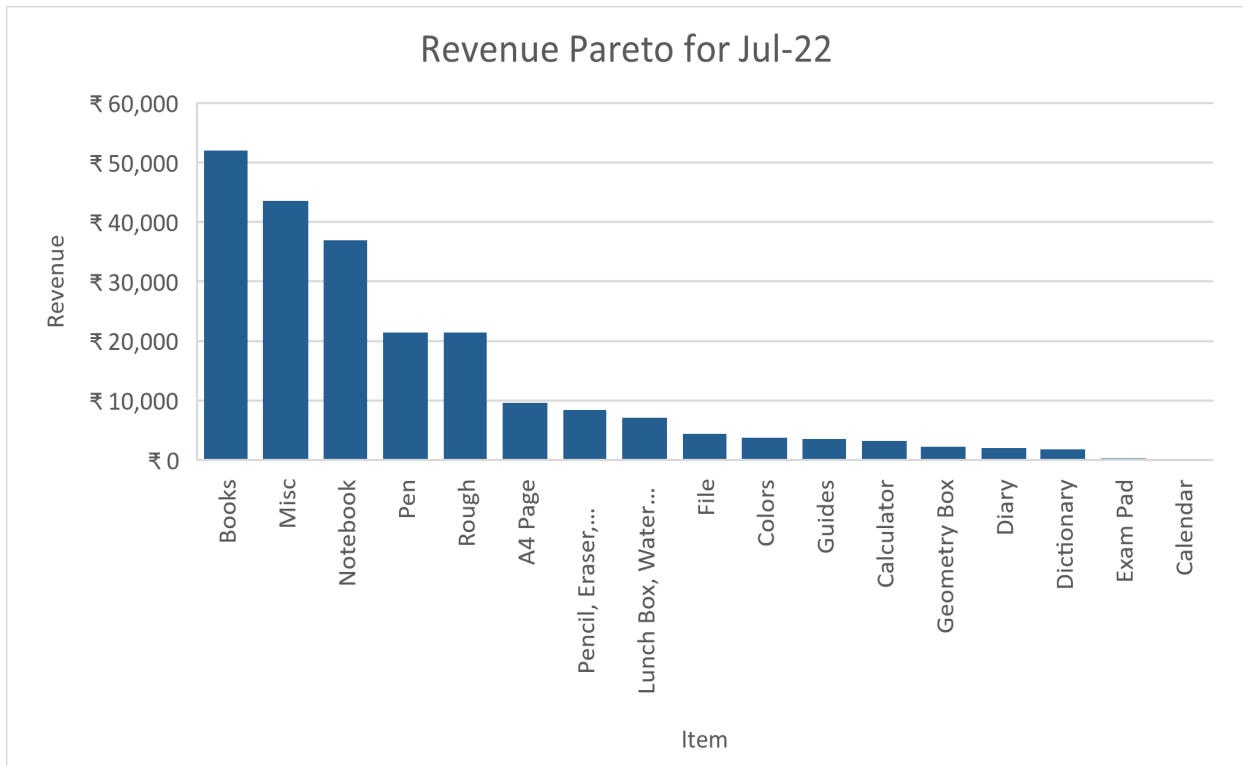
Fig2: Monthly Total Revenue

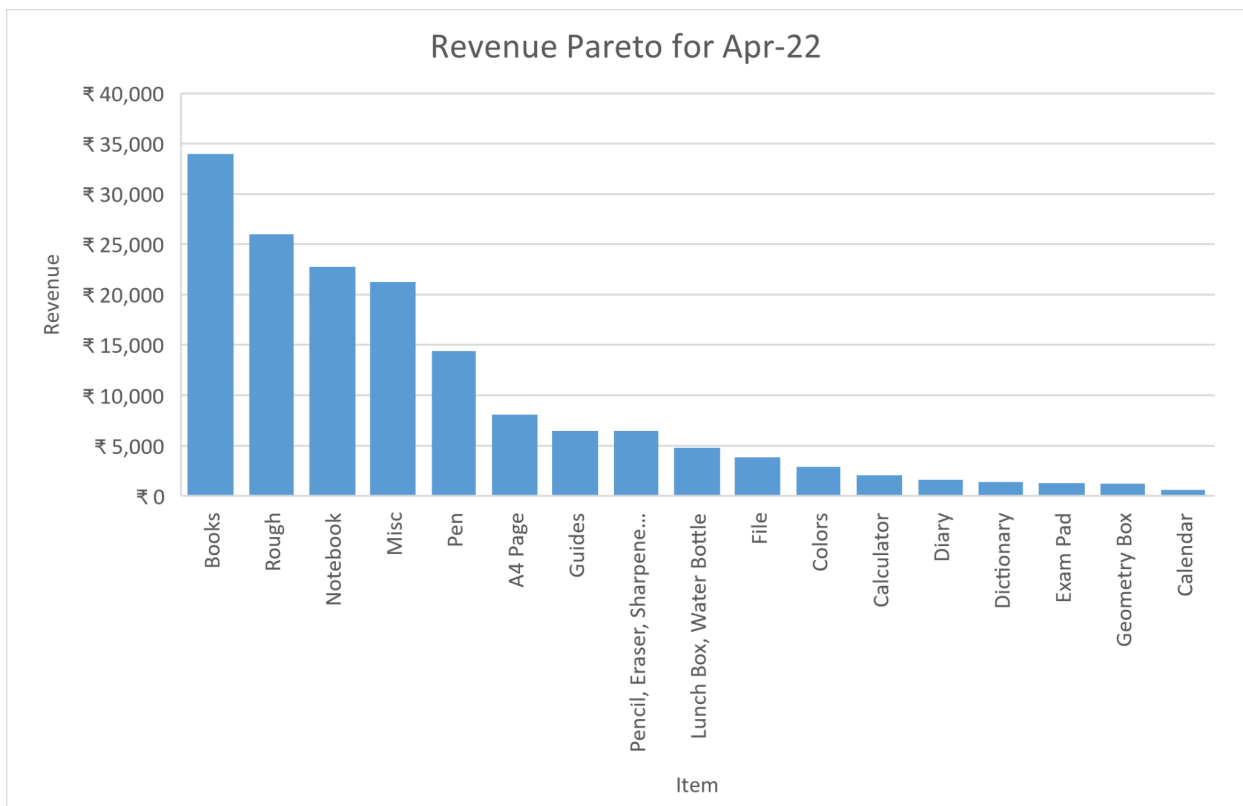
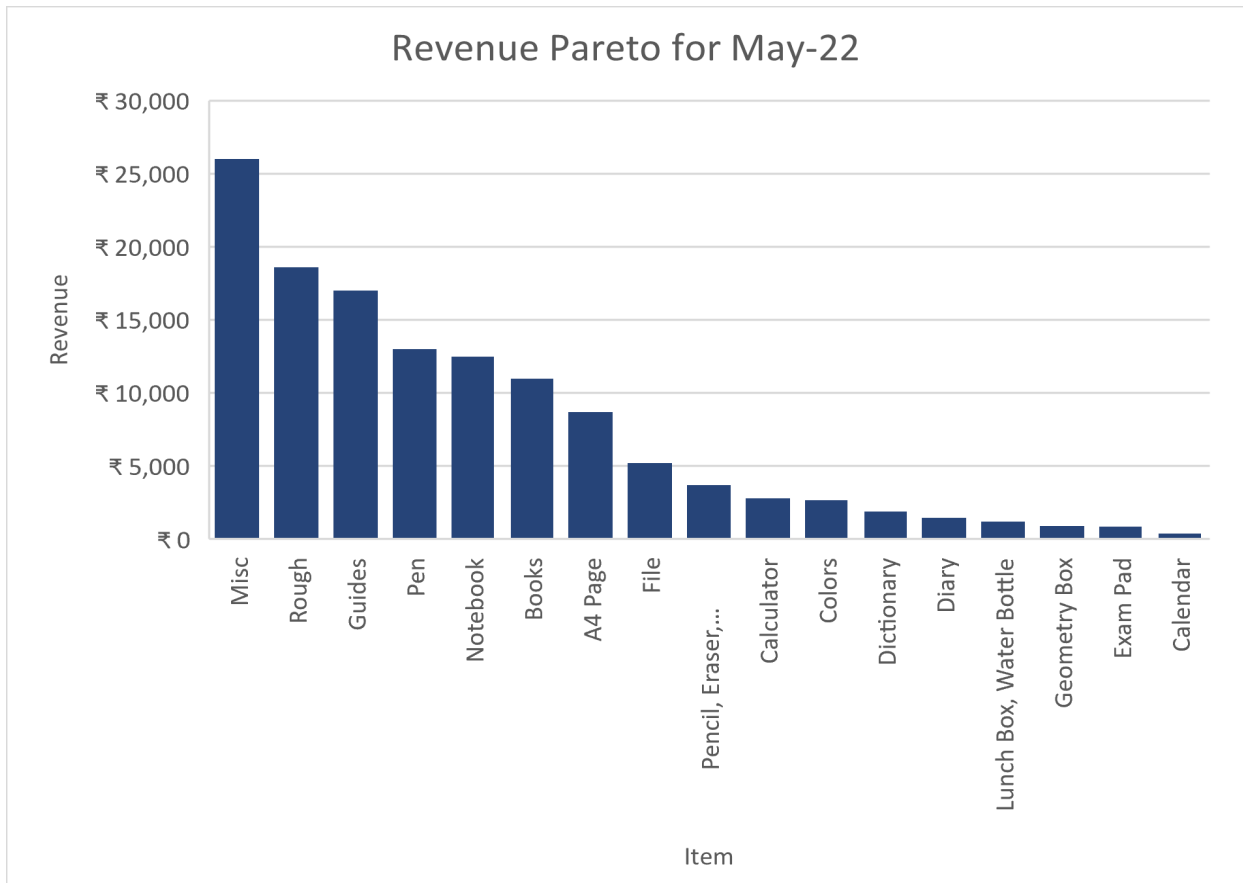
## Results and Findings

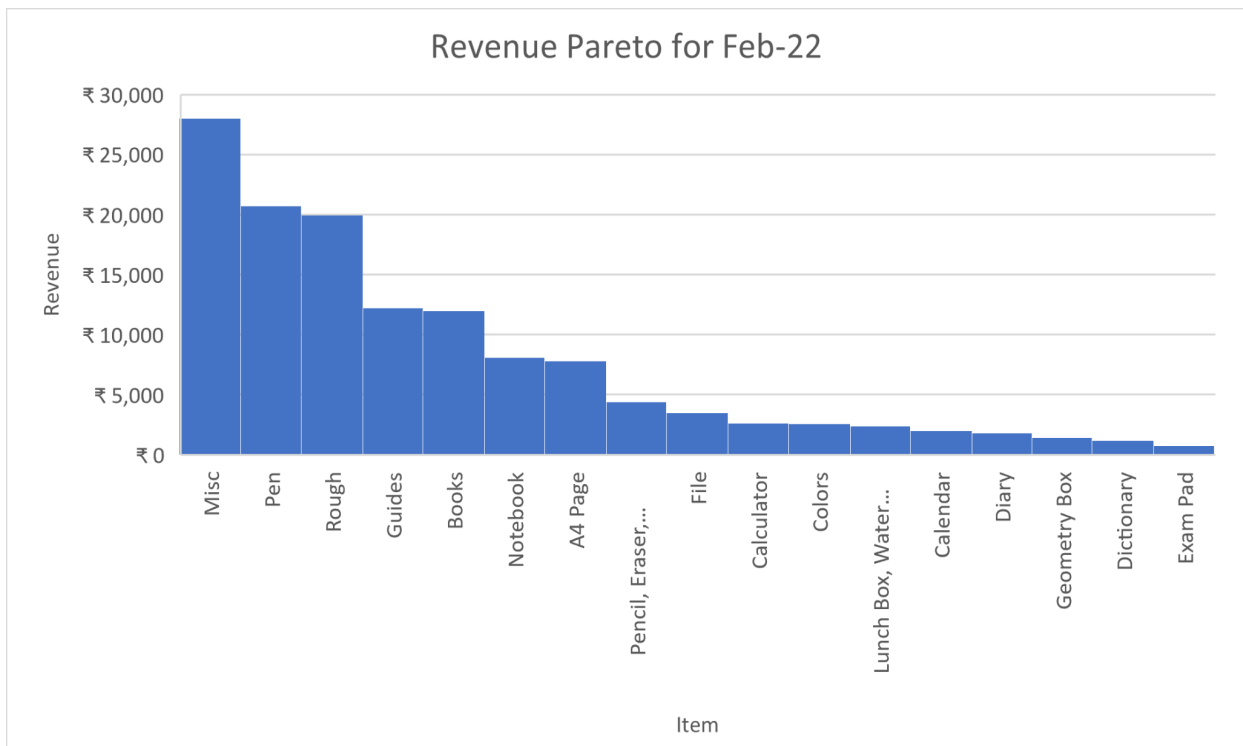
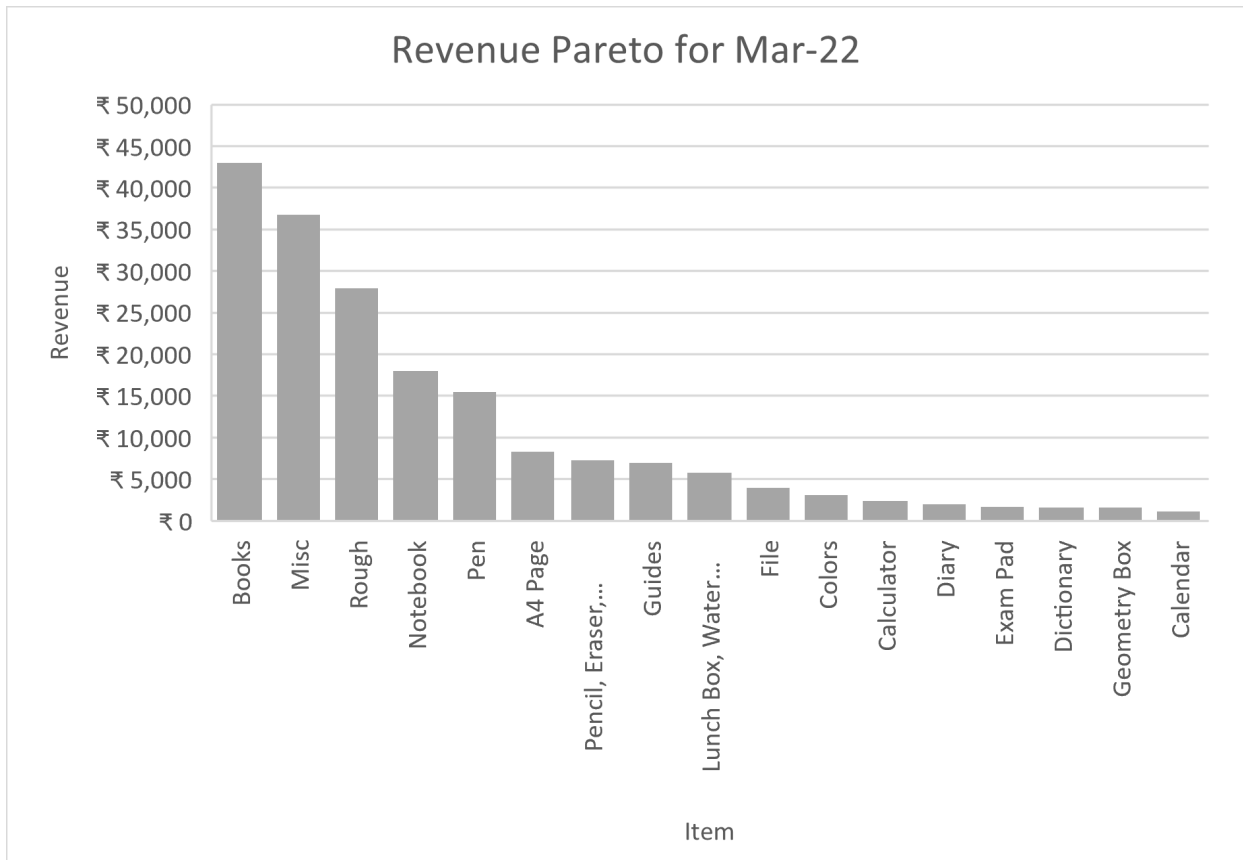
After analyzing the data and looking at the Revenue Pareto for each month, it has been found out that the Books are sold the most for 4 months (Mar, Apr, Jun and Jul) out of 6 months (Feb, Mar, Apr, May, Jun, Jul).

Leaving the 'Misc' category aside, the second and third most items that have been selling the highest are Rough and Notebooks.

It has been observed that the Books, Rough, and Notebooks are contributing to the sales the most. As a result, these items have been the major source of income for this business.







After looking at the Revenue per month Pareto, it has been observed that the highest Revenue is generated in July, out of 6 months. This has been happening maybe because as the new sessions of Schools and Colleges are opened, students might want to buy Books, Rough, Notebooks, Pen, etc., which are the major source of income as observed from the charts.

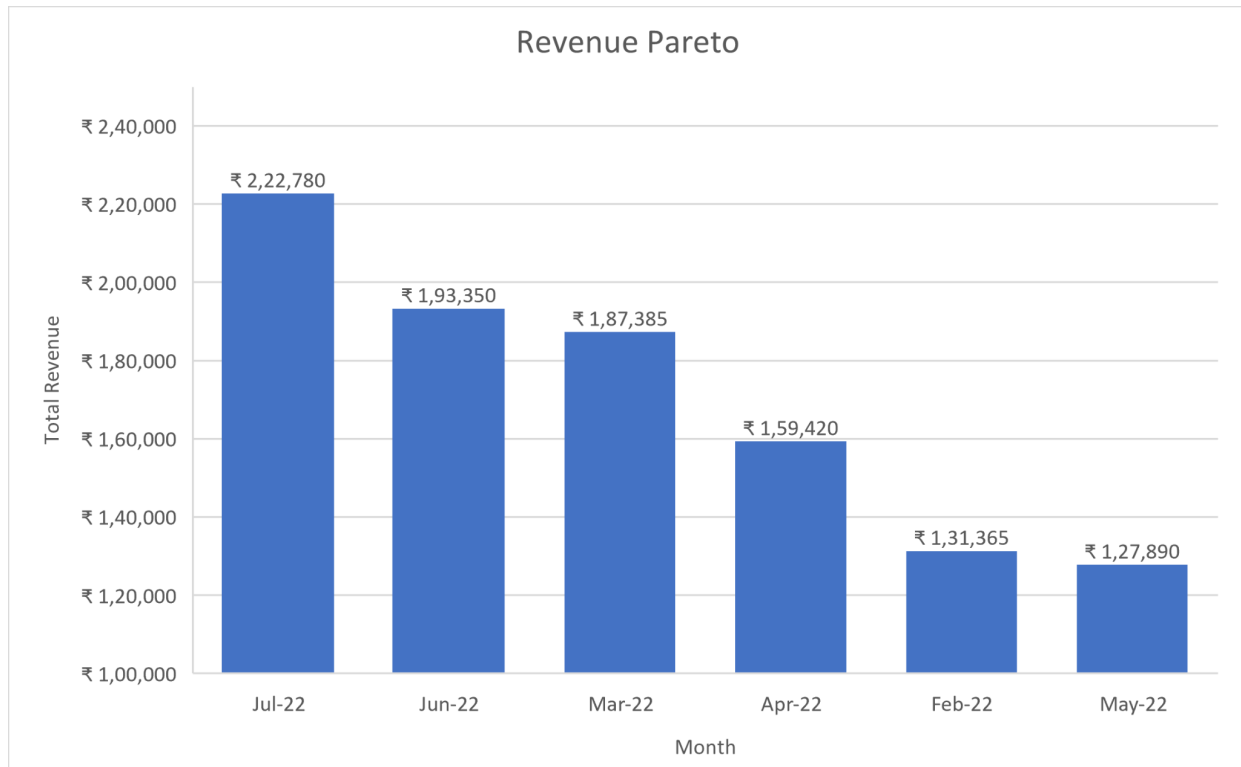


Fig: Monthly Total Revenue

The monthly shop expenses include Electricity, Godown, Rent and Vehicle, out of which Electricity, Godown and Rent are the operational expenses and are necessary to run the business. Vehicle is another necessary expense. It has been concluded that the fixed expense of Rs. 9500/month cannot be decreased.

## Interpretation of Results and Recommendation

- The highest Revenue items such as Books, Rough and Notebooks should be bought in bulk for July, to get the items at a low cost. As a result, the profit margin would be increased.
- As Students tend to buy more stationery in the months of June and July, the business owner should reach out to more schools and try to tie up with more schools.