

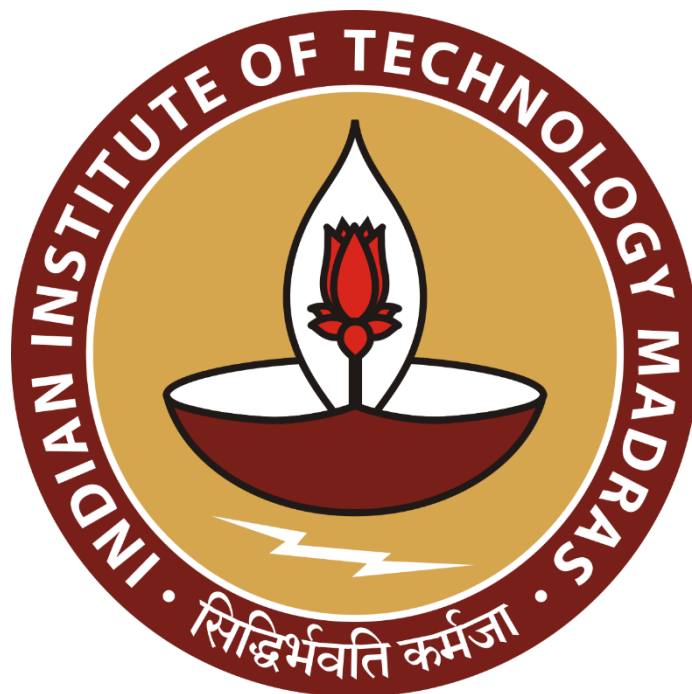
Data-Driven Revamp for 'Friends': Enhancing Inventory Management and Customer Engagement

The Final Report for the BDM capstone Project

Submitted by

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1 Executive Summary and Title

“Friends” is a B2B wholesale store in Kolkata that specializes in stationery products. It was established nearly 20 years ago by Mr. Anurag Agarwal and his wife, Mrs. Manisha Agarwal. The store grapples with various challenges including problems with inventory management, the absence of data-driven strategies and the traditional method of data collection through physical registers.

The analysis process involved meticulous data collection from "Friends" register notebook, focusing on a two-month period. This data underwent cleaning and preprocessing to ensure its integrity and reliability. A comprehensive Pareto analysis was conducted, focusing on revenue and volume, which helped identify key contributors to the business's performance. Inventory management was scrutinized by reconstructing stock data of top and bottom items, offering insights into sales performance and inventory turnover. Visualizations comparing stocks with sales further enhanced understanding of inventory dynamics, contributing significantly to strategic business decisions.

The analysis reveals key insights. Customers exhibit a significant degree of flexibility in product preferences by being open to both 70 and 75 GSM versions of A4 size paper, offering “Friends” an opportunity to diversify its product range. By focusing on the sale of A4 size paper and other stationary items, “Friends” could enhance their business. The incorporation of a photocopy machine and a printer could also serve as a value-added service. Strategic alliances with leading A4 Size Paper companies and their top 20 clients, as well as considering smaller clients, could drive higher sales and increase revenue.

2 Detailed Explanation of the Analysis Process

Data Collection

2.1 The data for the analysis was collected directly from the register notebook of “Friends”, specifically covering the period of August and September 2023. Due to the shop’s standard practice of purging data after a two-month period, it was not feasible to obtain information from months prior to this period. This limitation necessitated a focused analysis on the available data.

Data Format

2.2 To enable a comprehensive analysis, the data from the register notebook was meticulously transcribed into an Excel workbook manually. This process ensured the accuracy and integrity of the data, providing a reliable basis for the subsequent analysis. The resulting workbook, stored in the .xlsx format, served as the primary repository of data for the analysis. Microsoft Excel, with its robust data analysis capabilities, was the primary tool for all analytical tasks.

Date	Week	Particulars	Items	Quantity	Price Per Quantity	Amount
01-Aug-23	1	Victerrace Enterprises Pvt. Ltd.	Correction Pen	1	₹ 24.50	₹ 24.50
01-Aug-23	1	Victerrace Enterprises Pvt. Ltd.	Rule Dista	1	₹ 29.00	₹ 29.00
01-Aug-23	1	Cash	Exercise Copy 400 Pages Hard Bound	1	₹ 142.00	₹ 142.00
01-Aug-23	1	Cash	Octane Red Gel Pen 18%	4	₹ 7.00	₹ 28.00
01-Aug-23	1	Cash	Octane Blue Gel	6	₹ 7.00	₹ 42.00
01-Aug-23	1	Survi Apparels	Rule Dista	1	₹ 30.00	₹ 30.00
01-Aug-23	1	Cash	Battery Ultra	4	₹ 18.00	₹ 72.00
01-Aug-23	1	Cash	Pen Pentonic 12 Colour 18%	4	₹ 99.50	₹ 398.00
01-Aug-23	1	Cash	Bell Gems Clip 30Mm	1	₹ 19.00	₹ 19.00
01-Aug-23	1	Sintex-Bapl Ltd	Milk Powder	1	₹ 470.00	₹ 470.00

Figure 1: A sample of the data from MS Excel

Data Description

- 2.3 The data acquired for the analysis is outlined in the table below. Each column of data is accompanied by their respective descriptions, providing a clear understanding of the data elements. This structured approach to data organization facilitated a systematic and efficient analysis, contributing to the reliability of the findings.

Name of Column	Description
Date	The dates of sales ranging from 1st August 2023 to 30th September 2023.
Week	The week number which starts from 1 and goes on till 9.
Particulars	The customers purchasing products from "Friends" are generally companies and transactions are recorded under the respective organization's name. However, there are instances where "Friends" caters to individual customers not affiliated with any company. In such cases, these transactions are logged as "Cash" in the register.
Items	The name of the item bought by a company (customer).
Quantity	The number of items bought by a company.
Price Per Quantity	The price per quantity being offered by "Friends".
Amount	The product of Quantity and Price Per Quantity Columns which is the total amount paid by the company for the number of products they purchased.

The Week column was added to get a better understanding of the trends. It is again important to mention that due to the practice of discarding their data after two months, acquiring data prior to August 2023 was not possible.

Data Cleaning

- 2.4 Given that the data sourced from handwritten logs in notebook registers was predominantly clean, minimal cleaning and preprocessing was required to ensure its accuracy and consistency. Subsequent steps were undertaken to refine the data further. This involved the removal of duplicate entries, addressing missing values, and standardizing data formats to ensure uniformity. This meticulous data cleaning process was crucial in maintaining the integrity of the data, thereby facilitating accurate analysis and reliable insights. The standardized and cleaned data serves as a robust foundation for subsequent data analysis and decision-making processes.

External Factor Analysis

- 2.5 Through extensive discussions with Mr. Anurag Agarwal, it was revealed that the Covid-19 pandemic had a profound impact on the inventory management and product flow at "Friends". Products that were previously sold in bulk during the pre-pandemic era saw a significant decrease in demand post-pandemic. Specifically, trophies and prizes, which were once popular items due to various competitions being held in the nearby areas, experienced a substantial decline in sales. This downturn can be attributed to the widespread closure of offices and the transition to remote work, leading to a reduction in organized competitions.

Pareto Analysis

- 2.6 A comprehensive Pareto analysis was conducted for both customers and items, focusing on volume and revenue. The sales and revenue data for products were meticulously sorted in

descending order to prioritize high-performing items. Subsequently, the cumulative revenue and the percentage contribution to the total revenue were calculated to provide a holistic view of the financial performance.

- 2.7 A Pareto chart was constructed to visually represent the data, enabling the identification of key products and sales channels. This visual tool aids in strategic resource allocation and profit maximization by highlighting areas of high impact.
- 2.8 From the Pareto analysis, the top 20 customers and items sold were identified. These were determined by sorting the data in descending order, which allowed for the recognition of high-performing customers and items. This information is crucial as it highlights the key contributors to the business's revenue and volume, thereby informing strategic decisions for resource allocation and customer engagement.

Week Wise Analysis

- 2.9 A comprehensive analysis of the revenue by top 20 customers was conducted on a week-by-week basis to ascertain which customer contributed the most to the sales in each respective week. This methodical approach provided valuable insights into customer buying patterns and their impact on weekly revenue.

Inventory

- 2.10 Following the submission of the mid-term report, I approached Mr. Anurag Agarwal to delve deeper into the inventory management of "Friends". Utilizing the concept of Recall Bias, a cognitive phenomenon where past events are remembered inaccurately, I was able to reconstruct the opening and inward stock of the top and bottom 20 items sold by "Friends".
- 2.11 With the newly acquired data about the stocks, I proceeded to calculate the closing stocks. This calculation was based on the sales data, providing a clear picture of the inventory turnover. The exercise offered invaluable insights into the sales performance of "Friends", shedding light on the movement and turnover of the top and bottom 20 items. These insights, derived from a careful analysis of the inventory and sales data, contribute significantly to making more informed and strategic business decisions.
- 2.12 To further enhance the understanding of the inventory dynamics, visualizations were created to compare the opening stocks with sales, and inward stocks with sales. These visualizations served as a powerful tool to discern patterns and trends in the inventory movement and sales performance of the top and bottom 20 items sold by "Friends". By juxtaposing the opening and inward stocks with the corresponding sales data, it was possible to gain a deeper understanding of the inventory turnover rate and the sales velocity of these items.

SWOT Analysis

Strengths:

- 2.13 “Friends” has implemented effective inventory management strategies, particularly for its top-selling items, ensuring **optimal stock levels are maintained**. This strategic approach to inventory management is crucial in **preventing stock-outs** and overstock situations, thereby enhancing customer satisfaction and profitability.
- 2.14 A significant factor contributing to the success of “Friends” is its **robust customer base**, which contributes significantly to the overall sales. This strong customer base is a testament to the quality of products and services offered by “Friends”, and it forms the backbone of the business.
- 2.15 In addition to its strong customer base, “Friends” has established market dominance in the **A4 size paper** sector, offering both **70 and 75 GSM variants**. This wide range of offerings caters to diverse customer needs and preferences, further strengthening its position in the market.
- 2.16 “Friends” has established **strong relationships with leading companies** in the A4 paper market. These relationships foster business growth by ensuring a steady supply of high-quality products and opening up opportunities for collaborative initiatives.

Weaknesses:

- 2.17 “Friends” **faces inconsistent sales performance** of certain products, such as **pen-drives**. This inconsistency indicates a need for a thorough **product review** to understand the underlying issues and devise strategies to improve sales performance.
- 2.18 Another challenge faced by “Friends” is the **imbalance in supply and demand for the least selling 20 items**. This imbalance suggests a need for inventory adjustment to align with market demand. By optimizing inventory levels, “Friends” can reduce carrying costs and prevent overstocking or stock-out situations.
- 2.19 A discrepancy has been observed between inventory levels and market demand for the bottom 20 items. This discrepancy indicates a **potential for overstocking**, which can lead to increased storage costs and reduced profitability. It’s crucial for “Friends” to monitor inventory levels closely and adjust them based on sales trends and market demand.
- 2.20 “Friends” seems to be attempting to be a *jack of all trades* rather than focusing on its most sold segment, i.e., stationary products. This approach **might dilute the focus and impact the quality of its core offerings**. It might be more beneficial for “Friends” to specialize in its stationary products segment, where it has proven success, rather than spreading its resources thin across multiple areas. By focusing on becoming a *master of one*, “Friends” could potentially become specialists in that area, leading to better business outcomes.

Opportunities:

- 2.21 A significant opportunity lies in **focusing on high-performing items and promoting them more aggressively** to nearby schools and offices. By directing marketing efforts towards these items, “Friends” could potentially increase its revenue. This strategy involves understanding the unique selling points of these items and communicating them effectively to the customers.
- 2.22 Another opportunity is to **broaden the product range** in the A4 paper segment. By catering to diverse customer needs and preferences, “Friends” can **potentially attract a wider customer base** and increase sales. This could involve introducing new variants or brands of A4 paper to offer more choices to the customers.
- 2.23 In addition to expanding the product range, “Friends” could also consider incorporating additional services such as a **photocopy machine and printer**. These services could complement their existing product offerings and provide added convenience to the customers. By meeting multiple needs of the customers under one roof, “Friends” could potentially boost its business revenue.
- 2.24 “Friends” has the opportunity to clear out inventory and attract new customers by **offering discounts on the bottom 20 items**. This strategy could help in liquidating the stagnant inventory, freeing up storage space, and reducing the carrying cost of unsold items. At the same time, it could potentially attract new customers who are looking for discounted items.

Threats:

- 2.25 A significant threat is the **concentration of significant revenue in a small fraction** of the product range. This concentration poses a risk to business stability as it makes the business vulnerable to fluctuations in the sales of these few products. Diversifying the product range and reducing dependence on a few high-performing items could mitigate this risk.
- 2.26 Another threat is the dependence on a small proportion of customers for the majority of sales. This dependence indicates a need for customer diversification. Relying heavily on a few customers could pose a risk if these customers were to reduce their purchases or switch to a competitor. Therefore, it’s crucial for “Friends” to broaden its customer base to ensure a steady flow of revenue.
- 2.27 Lastly, the risk of incurring unnecessary storage costs due to unsold inventory poses a threat to profitability. Excess inventory ties up capital and incurs storage costs, thereby reducing profitability. Effective inventory management strategies are needed to prevent overstocking and ensure that the inventory levels align with market demand.

3 Results and Findings

3.1 The top 20 selling items from “Friends” are as follows:

Revenue Wise	Quantity Wise
Bilt Copy Power (75GSM) A4 Paper	Envelop Brown 10X4.5
Trophy (18%)	Envelop Brown 11X5
Jk Easy Copier (70GSM) A4 Paper	Letter Pad (12%)
Pen Drive 32 GB	Pen Fort 18%
April Pp Lite (70 GSM) A4 Paper	Envelop White 10X4.5
Cobra File Real Gold	Cobra File Real Gold
Bottle Bamboo	Air Bubble
Gift Set Three In One	Envelop White 11X5
Jk Copier (75GSM) A4 Paper	Pencil Glass Marking
18 inch Film in Roll	Envelop Cloth 12X10
Reimburesement of Mkt Development Activity	Rubber Band 500 Gm
Tape 3" Transplant	Bilt Copy Power (75Gsm) A4 Paper
Arch File Kangaro (Big)	Envelop Cloth 11X5
Plastic 16X20	Envelop Cloth 12X6
Corrugated Roll	Envelop Cloth 16X12
Tape 2" Brown	Nj Mpl 01P
Air Bubble	Visiting Card
Laser Foil (Silver)	Envelop Cloth 14X10
Cobra File Gold Plus	Envelop Brown 14X10
Bilt Coco (70GSM) A4 Paper	Pencil



Figure 2: Top 20 Items Sold by "Friends" Revenue Wise



Figure 3: Top 20 Items Sold by "Friends" Quantity Wise

3.2 The top 20 items sold constitute a significant portion of the sales, accounting for approximately 60% of the total sales in terms of both revenue and quantity.

3.3 The top customers of "Friends" were found to be the following:

Revenue Wise	Quantity Wise
Lanshree Products & Services Ltd.	Kanco Tea & Industries Ltd.
Ashok Hall Girls Higher Secondary School	Diamond Bottling Plant Co
Indiafirst Life Insurance Company Ltd.	CHASE LIFESTYLE PVT. LTD.
Securities And Exchange Board Of India	Securities and Exchange Board of India
Gail India Ltd.	Cash
Chase Lifestyle Pvt. Ltd.	Tasati Tea Ltd.
S B Enterprisers	Gail India Ltd.
Cash	Lanshree Products & Services Ltd.
Kanco Tea & Industries Ltd.	Essen Fabricators Pvt. Ltd.
Dhunseri Tea & Industries Ltd.	Intra Project Consultants
Hdfc Life	SKS Capital & Research Pvt. Ltd (Mumbai)
Amit Mines Pvt. Ltd.	Deeplok Builder Pvt. Ltd
Idfc First Bank Ltd	Amit Mines Pvt. Ltd.
Singhanian & Sons Pvt. Ltd.	DALMIA LOGISTICS & WAREHOUSES PVT. LTD.
French Motors Car Co. Ltd.	Bluechip Insurance Broking Pvt. Ltd
Hdfc Bank Ltd	Kanchana
Bluechip Insurance Broking Pvt. Ltd	KARNANI PROPERTIES LTD.
Essen Fabricators Pvt. Ltd.	The Astor
Park Clinic	Palash Bari Tea Co. Ltd.
Tasati Tea Ltd.	Ashok Hall Girls Higher Secondary School

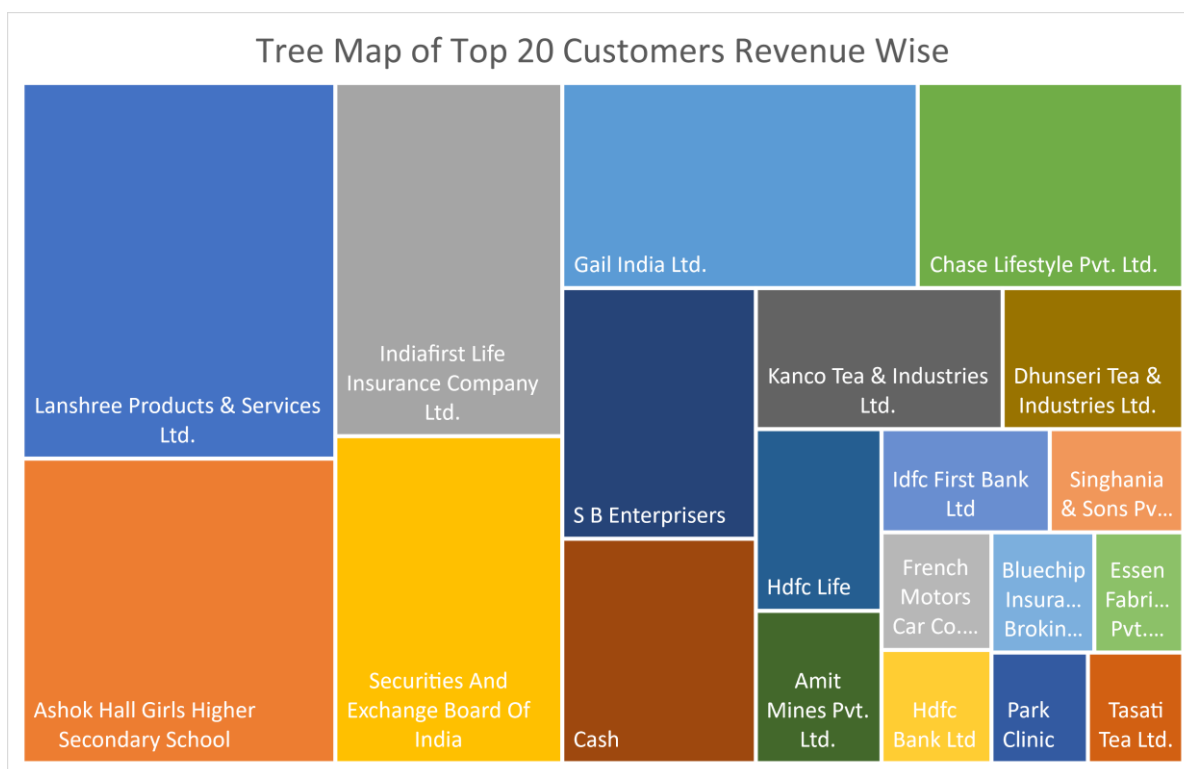


Figure 4: Tree Map of top 20 Customers of "Friends" Revenue Wise



Figure 5: Tree Map of Top 20 Customers of "Friends" Quantity Wise

- 3.4 The top 20 customers of "Friends" hold a significant position in the business, contributing to 60% of the sales revenue and 70% of the sales in terms of quantity.

- 3.5 The When analyzing the revenue generated by "Friends", it is observed that the Pareto principle, also known as the 80/20 rule, holds true. Out of a total of 267 customers, only 58, which is approximately 20%, are responsible for generating 80% of the sales. This observation aligns with the Pareto principle, which posits that a significant portion of the output in a given context is often produced by a relatively small fraction of the input. In this case, a small proportion of "Friends" customer base is contributing to the majority of its sales. This insight could be instrumental in shaping "Friends" customer engagement and marketing strategies.

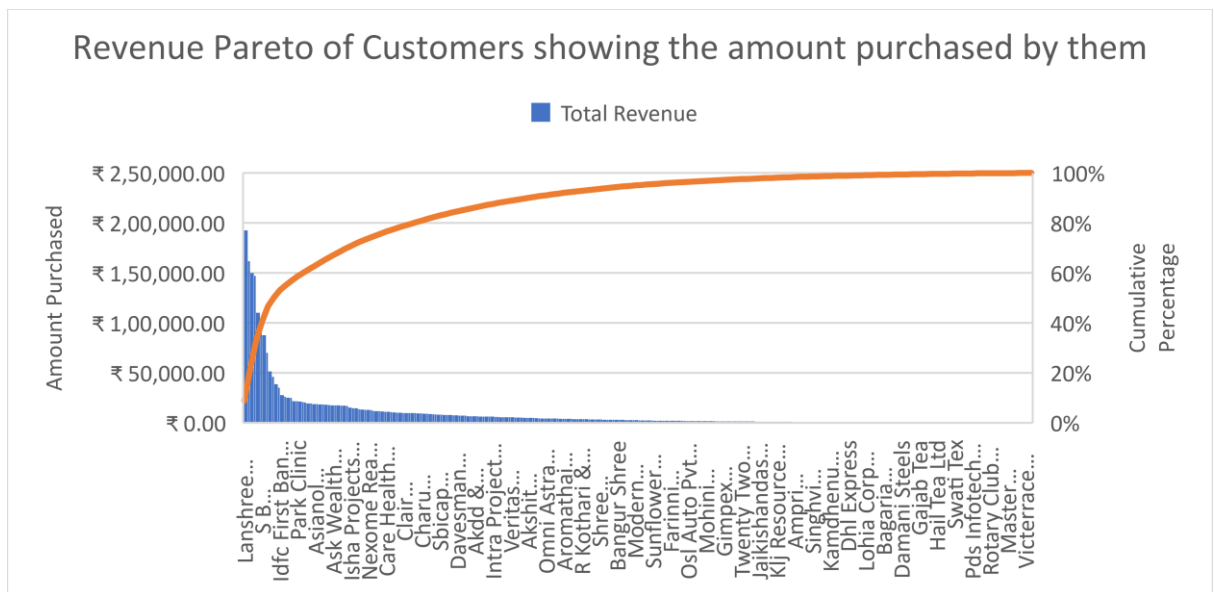


Figure 6: Revenue Pareto of Customers

- 3.6 When analyzing the quantity of items sold, the Pareto principle now exhibits a 90-10 distribution. Out of the 537 items sold, only 52 items which is less than 10%, are responsible for generating 80% of the revenue. This finding could be crucial in formulating inventory management and sales strategies, as it highlights the importance of focusing on these high-performing items. It also underscores the need for effective product selection and strategic marketing to maximize revenue generation.

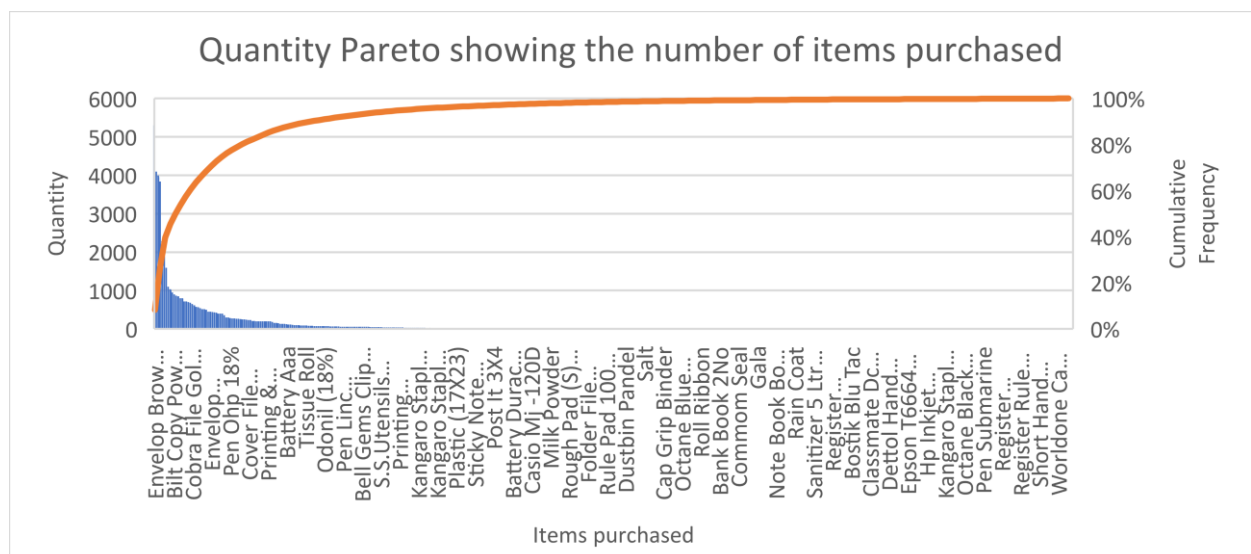


Figure 7: Quantity Pareto of Items Sold

- 3.7 In the context of analyzing the revenue generated from items sold, it is observed that the Pareto principle is almost applicable. Out of a total of 537 items, 76 items, which constitute approximately 14% of the total items, are responsible for generating 80% of the revenue. This scenario is slightly deviated from the classic 80-20 distribution of the Pareto principle, but it still highlights a significant concentration of revenue in a relatively small fraction of the product range.

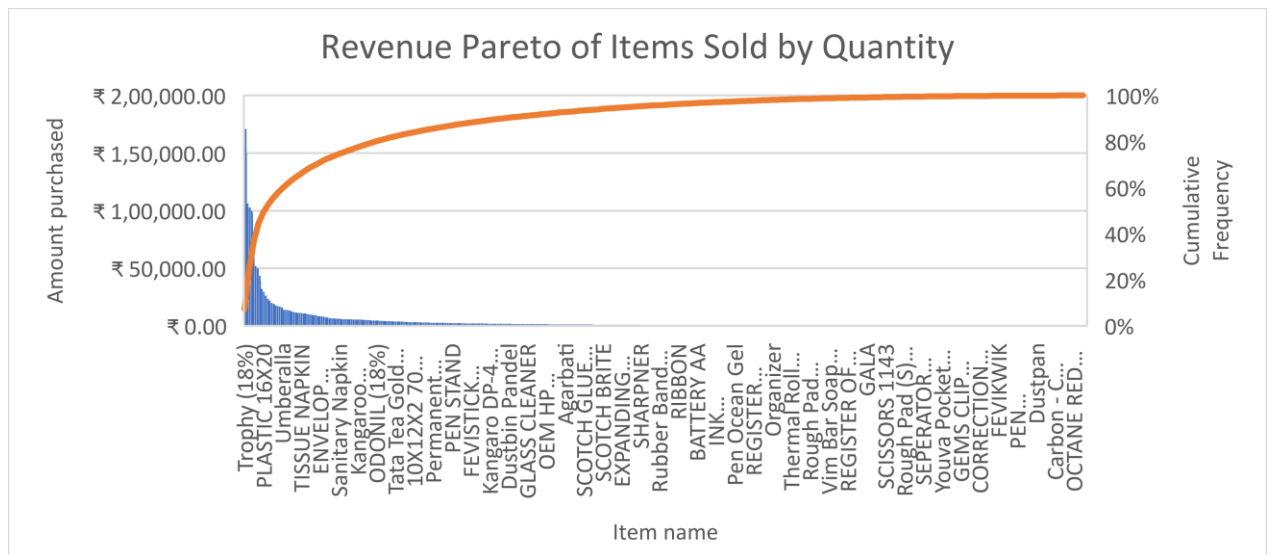


Figure 8: Revenue Pareto of Items

- 3.8 Over a period of nine weeks, the revenue generated by “Friends” exhibited notable fluctuations. The second week marked a significant peak with the revenue soaring to ₹4,55,145.67, the highest across all weeks. However, by the fifth week, the revenue dipped to its lowest at ₹1,50,383.56. This was followed by a rebound in the sixth week and another substantial increase in the seventh week, where the revenue rose to ₹3,66,829.62.



Figure 9: Week Wise Revenue of "Friends"

3.9 In terms of revenue generation, the top three customers exhibited distinct spending patterns:

3.9.1 **Lanshree Products & Services Ltd.**, the highest revenue contributor, demonstrated a dispersed spending pattern across multiple weeks, specifically **weeks 1, 2, 5, and 9**. This indicates a consistent engagement with our business over the period.

3.9.2 **Ashok Hall Girls Secondary School**, the second-highest revenue generator, had concentrated spending in **weeks 3 and 8**. This could suggest a more project-based engagement where expenditures are tied to specific timeframes.

3.9.3 Lastly, **IndiaFirst Life Insurance Company**, another key customer, made a significant one-time expenditure in **week 2**. This substantial investment underscores their position among the top contributors to our revenue.

Top 20 Customers	Week									Grand Total
	1	2	3	4	5	6	7	8	9	
Lanshree Products & Services Ltd.	₹ 22,200.00		₹ 16,220.00				₹ 1,15,140.00	₹ 84,000.00		₹ 2,37,560.00
Ashok Hall Girls Higher Secondary School			₹ 1,65,880.00				₹ 26,700.00			₹ 1,92,580.00
IndiaFirst Life Insurance Company Ltd.		₹ 1,62,000.00								₹ 1,62,000.00
Securities and Exchange Board of India						₹ 92,160.00	₹ 15,600.00	₹ 42,334.20		₹ 1,50,094.20
Gail India Ltd.		₹ 1,00,000.00		₹ 11,200.00		₹ 36,040.00				₹ 1,47,240.00
CHASE LIFESTYLE PVT. LTD.		₹ 46,075.06	₹ 6,003.26				₹ 57,130.00		₹ 890.00	₹ 1,10,098.32
S B ENTERPRISES				₹ 98,000.00						₹ 98,000.00
Cash	₹ 5,242.54	₹ 649.00	₹ 10,486.64	₹ 20,422.12	₹ 6,153.60	₹ 15,009.46	₹ 8,755.98	₹ 8,924.36	₹ 12,013.12	₹ 87,656.82
Kanco Tea & Industries Ltd.								₹ 32,900.00	₹ 37,312.00	₹ 70,212.00
Dhunseri Tea & Industries Ltd.				₹ 1,650.00	₹ 37,302.40		₹ 100.00	₹ 12,356.00		₹ 51,408.40
HDFC Life			₹ 17,420.00	₹ 9,540.00				₹ 19,200.00		₹ 46,160.00
Amit Mines Pvt. Ltd.	₹ 18,345.00					₹ 20,368.36				₹ 38,713.36
IDFC First Bank Ltd								₹ 35,200.00		₹ 35,200.00
Singhanian & Sons Pvt. Ltd.	₹ 13,860.00		₹ 5,600.00	₹ 2,348.96			₹ 200.00	₹ 5,870.00		₹ 27,878.96
French Motors Car Co. Ltd.		₹ 14,959.20						₹ 11,176.00		₹ 26,135.20
Hdfc Bank Ltd			₹ 16,073.60	₹ 9,090.00						₹ 25,163.60
Bluechip Insurance Broking Pvt. Ltd	₹ 8,595.52				₹ 11,471.93	₹ 4,310.48		₹ 635.62		₹ 25,013.55
Essen Fabricators Pvt. Ltd.				₹ 21,564.09						₹ 21,564.09
Park Clinic	₹ 5,400.00	₹ 711.90	₹ 3,168.00	₹ 2,232.70	₹ 2,376.00	₹ 2,870.00	₹ 2,700.00		₹ 2,097.12	₹ 21,555.72
Tasati Tea Ltd.					₹ 21,289.20					₹ 21,289.20
Grand Total	₹ 73,643.06	₹ 3,24,395.16	₹ 2,40,851.50	₹ 1,76,047.87	₹ 78,593.13	₹ 1,70,758.30	₹ 2,26,325.98	₹ 2,52,596.18	₹ 52,312.24	

Figure 10: Week wise distribution of Revenue by Top 20 Customers

3.10 The star product of “Friends” is the **A4 size paper, both 70 and 75 GSM variants**. hold a substantial position in the business, contributing to 23.5% of the total revenue. This is a significant proportion, indicating the popularity and high demand for these specific products among the customers.

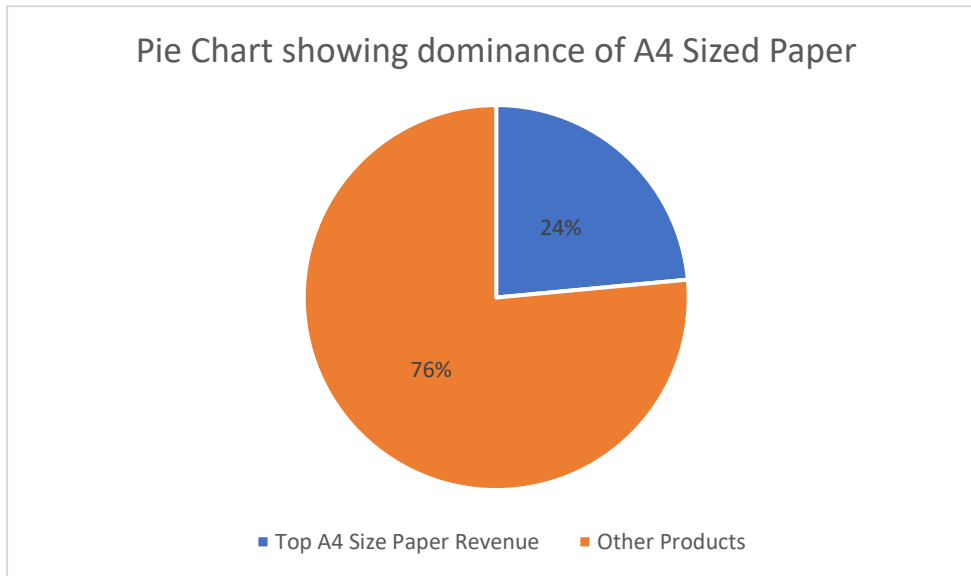


Figure 11: Pie Chart comparing A4 size paper with other products

- 3.11 In the market of A4 Size paper for “Friends”, there are 3 dominant companies – **Bilt, Jk and April**. These companies have managed to carve out a significant share as customers of the business by demonstrating their dominance through their extensive product range, consistent quality and strong brand recognition.

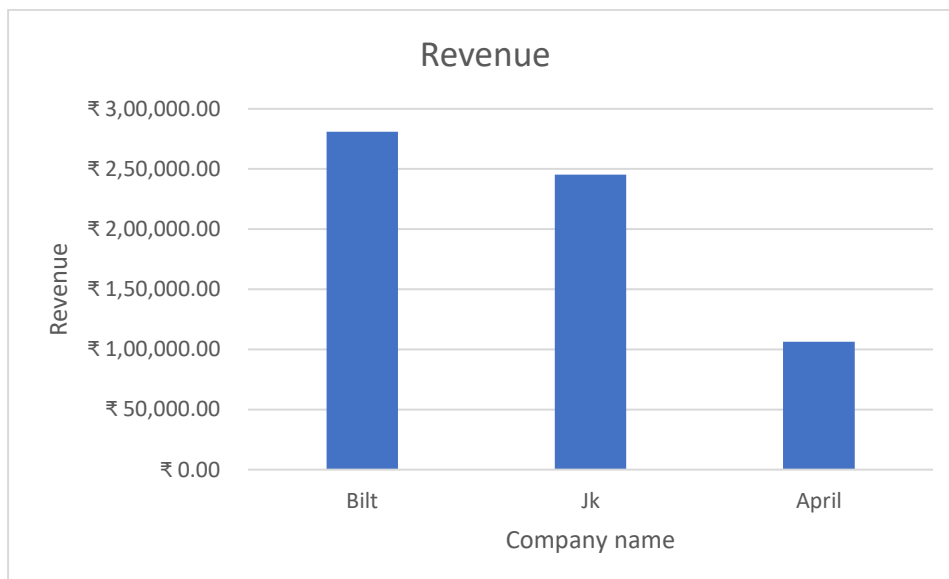


Figure 12: Bar Chart showing Revenue generated by top 3 companies of A4 Size Paper

- 3.12 For top 20 items, such as **Envelop Brown 10X4.5, Envelop Brown 11X5, Letter Pad (12%)** average inventory is effectively maintained. The sales figures align closely with the stock levels. This suggests a well-balanced inventory management system where the supply of these products aligns well with the demand. It is a positive indication of effective inventory control, ensuring that the stock levels are neither too high to incur unnecessary storage costs nor too low to miss potential sales opportunities.

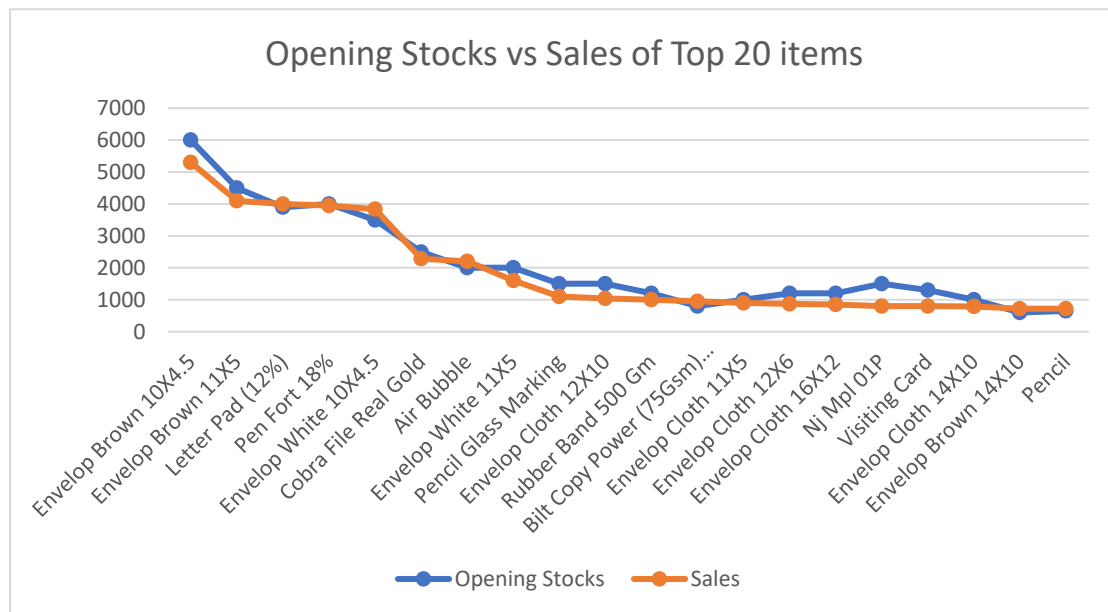


Figure 13: Line Chart of Opening Stocks vs Sales of Top 20 items

- 3.13 Upon examining the top 20 items in “Friends” inventory, it is observed that the inward stocks and sales figures are closely aligned. This indicates an efficient inventory management system where the supply meets the demand effectively. The synchronization between stocks and sales for these items suggests that “Friends” has been successful in predicting the market demand for these products and maintaining an optimal inventory level.

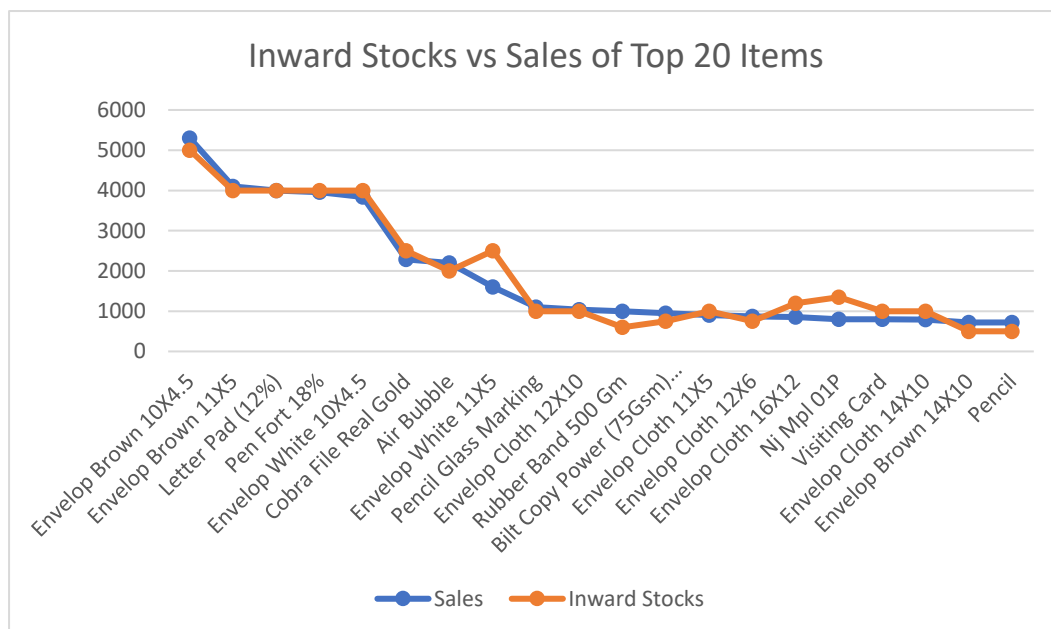


Figure 14: Line Chart of Inward Stocks vs Sales of Top 20 items

- 3.14 For the least selling 20 items in the inventory, such as **Tgz 432 Bottle Flow**, **Worldone 20 Pocket Folder** and **White Board Non-Magnetic 1.5X2**, it is observed that the sales figures are

quite low. Despite this, these items occupy a substantial portion of the inventory. This indicates an imbalance between the supply and demand for these products, with the supply significantly outweighing the demand.

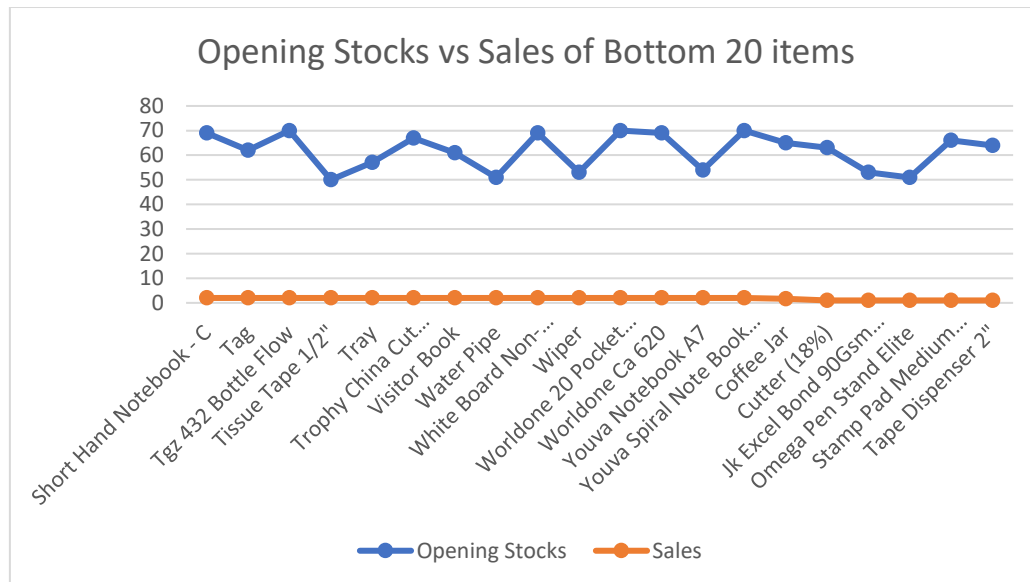


Figure 15: Line Chart of Opening Stocks vs Sales of Bottom 20 items

- 3.15 The Inward Stocks scenario is different for the bottom 20 items. Despite being stocked, these items are not selling as expected, indicating a discrepancy between the inventory levels and market demand. This could be due to various factors such as changes in customer preferences, pricing issues, or lack of effective marketing strategies for these products. It is crucial for "Friends" to address this issue to prevent potential losses due to unsold inventory and to make efficient use of their storage space.

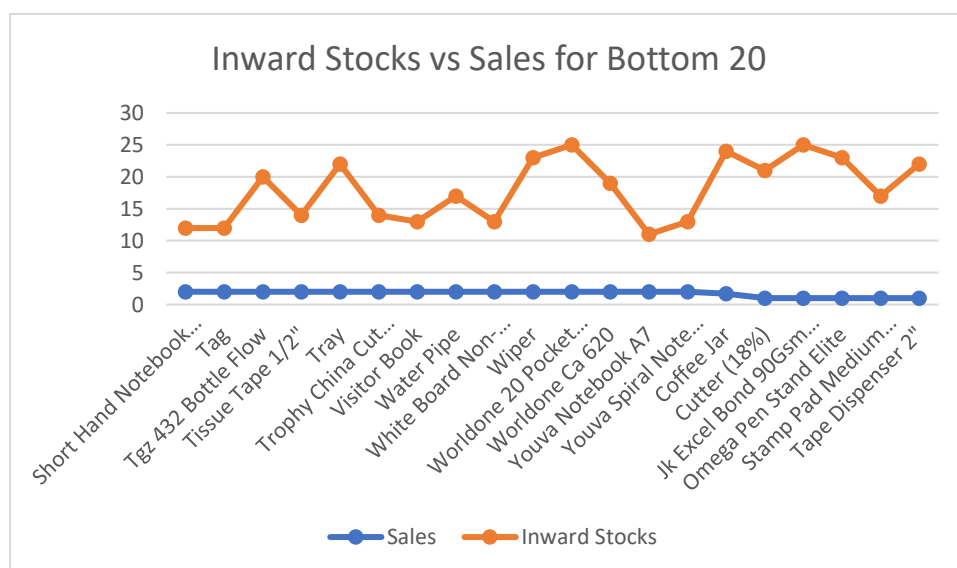


Figure 16: Line Chart of Inward Stocks vs Sales of Bottom 20 items

4 Interpretation of Results and Recommendations

Interpretations

- 4.1 The analysis of the data presented provides several key insights, although it's important to note that the conclusions drawn may not be entirely accurate due to the exceptional circumstances surrounding the data collection period. A span of two months is a relatively short timeframe to form definitive conclusions, particularly when considering the impact of Covid-19 pandemic. To gain a more comprehensive understanding of pre and post-Covid trends, it would be beneficial to analyze at least a year's worth of data.
- 4.2 In terms of product preferences, it has been observed that customers display a considerable degree of flexibility. "Friends" has a strong market presence in the A4 size paper sector, offering both 70 and 75 GSM variants, catering to diverse customer needs and preferences. It has also fostered strong relationships with leading companies in the A4 paper market, ensuring a steady supply of high-quality products.
- 4.3 Despite exhibiting a substantial profit margin of ₹ 1,50,000, Pen-drives stand out as an anomaly. This is primarily due to the inconsistency in their sales performance. While the high profit margin indicates a potential for significant revenue, the lack of consistency poses a challenge.

Recommendations

- 4.4 "Friends" could potentially benefit by focusing more on selling A4 size paper and other stationary products, rather than diversifying too much. The phrase "Jack of all trades, master of none" is applicable here. By specializing in stationary items, they could establish themselves as specialists in that area, which might lead to improved business outcomes.
- 4.5 Given the high sales of stationery items at "Friends", the incorporation of a photocopy machine and a printer could potentially enhance their business revenue. This strategy could serve as a value-added service for their existing customer base, who are already purchasing stationery items from the store. Customers who come in for stationery might have printing or photocopying needs, and providing these services in-house could increase convenience for the customers, thereby enhancing their shopping experience.
- 4.6 "Friends" should strategically engage with either of the top 3 A4 Size Paper companies - Bilt, Jk and April. By negotiating a mutually beneficial agreement, which could include volume-based incentives or exclusive partnerships, "Friends" can potentially strive for higher sales. This approach not only strengthens supplier relationships but also enhances the value proposition for 'Friends' in the competitive stationery market.
- 4.7 "Friends" also has the opportunity to strategically engage with their top 20 clients to explore new partnership avenues. By understanding their clients' needs, "Friends" can offer tailored solutions such as home delivery services with free shipping, premium offerings and incentive

programs. This proactive approach not only strengthens client relationships but also enhances customer loyalty and potentially increases revenue. It is a win-win situation that could significantly contribute to “Friends” growth in the competitive stationery market.

- 4.8 Furthermore, as a B2B enterprise, “Friends” should not ignore its smaller clients who could become significant contributors in the future. They should initiate proactive communication with these clients, understand their specific needs and establish a mutually beneficial arrangement as part of the customer segmentation. Additionally, “Friends” could consider product bundling strategies, such as combo packs of pencils, erasers, and sharpeners with notebooks, to enhance value proposition and customer satisfaction. This approach could potentially drive customer loyalty and revenue growth.
- 4.9 As can be seen from the provided images, the shop is filled with numerous trophies, which were once high-revenue items in the pre-pandemic era. However, at present, these trophies are merely occupying storage space and are no longer being sold due to the closure of many companies or the discontinuation of competitions. To address this issue, it is recommended to invest in an affordable warehouse to store items that are infrequently sold and products that are less desirable. This strategy will help in better inventory management and efficient use of storage space. “Friends” could explore marketing strategies such as offering substantial discounts to nearby schools, potentially driving sales of these items.
- 4.10 For the bottom 20 items in the inventory, a strategic approach could be to target nearby schools. By offering these items at significantly discounted prices, “Friends” can not only clear out their inventory but also potentially attract new customers. This strategy serves a dual purpose. Firstly, it helps in liquidating the stagnant inventory, thereby freeing up storage space and reducing the carrying cost of unsold items. Secondly, by introducing their products to a new customer base, “Friends” can potentially increase their market reach.
- 4.11 To enhance the efficiency and accuracy of data collection, it is recommended that “Friends” consider investing in a computer system and implementing a software solution known as “Tally”. Tally is a renowned enterprise resource planning software that is widely used for comprehensive business functionalities such as accounting, finance, inventory management, sales, purchase, and more.
- 4.12 By leveraging Tally, “Friends” can automate their data collection process, thereby reducing manual errors and improving the accuracy of their records. This software will enable “Friends” to maintain real-time records of their transactions, inventory, and customer information, which are crucial for effective business management.

Final Note:

It is important to note that the recommendations provided are based on an analysis of a relatively short period, specifically two months of data (August and September 2023). This timeframe may not fully capture the long-term trends or seasonal variations that could significantly impact the business. Therefore, these recommendations should be considered as an approximate overview and may not be 100% accurate. Market conditions can change rapidly and unpredictably, which can influence the effectiveness of these strategies. As such, while implementing these recommendations, caution should be exercised.

[Link of the dataset and further proof](#)