

Direct Sell Precision: Data Driven Strategies For Altos

A mid-term report for the BDM capstone Project

Submitted by

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Declaration Statement

I am working on a Project titled “**Direct Sell Precision: Data Driven Strategies For Altos**”. I extend my appreciation to “**Altos Mangalam Enterprises**”, for providing the necessary resources that enabled me to conduct my project.


I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analyzed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the principles of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project's completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfillment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.

Signature of Candidate: 

Name: Kunal Kawadkar

Date: 02 February 2024

1 Executive Summary

Living a happy and fulfilled life requires maintaining good health and wellbeing. In order to achieve this, a variety of health and wellness items are essential. A health and personal care store must, like any other business, cultivate a strong connection with its customers and keep sufficient supplies on hand to avoid both stockouts and stock decomposition.

This project is based on "**Altos Mangalam Enterprises**," a health and personal care business in *Chhindwara, Madhya Pradesh*, as was previously mentioned in the proposal. The company's net profit is minimal even though their shells are large. because of problems with data utilization, seasonal demand fluctuations, and inventory management.

Goal for mid-term :

- To determine which SKU (or items) is most suited for holding in longer-term sales and which contributes more to the net profit.
- Determining the Factors Contributing to the High Variability in Health and Wellness Product Sales
- Identify and evaluate revenue – related patterns.

2 Proof of the originality of data:

1. Details of the shop

- Shop name: Altos Mangalam Enterprises
- Owner: Mr. Sunil Soni
- Address: Chhindwara, Madhya Pradesh

2. Background

Altos Mangalam Enterprises sells various types of products related to health care, personal care, agriculture, hair care etc. Offering a wide variety of daily necessities to cater to both B2B and B2C clients.

After getting a great deal of expertise with Altos products, Mr. Sonil Soni opened his first Altos product store in the city of Chhindwara in 2017. Four full-time employees and two part-timers are employed by the store, which also needs workers for product distribution.

3. Shop image

As proof of the data, I have gathered a few photos of the store, including the owner's photo. I also have a brief video chat with the store owner.



(1.1) Shop entrance.



(1.2) Altos products picture



(1.3) The shop owner Mr. Sonil Soni

4. A short video 3-8 mins interacting with the founder:

<https://drive.google.com/file/d/11T59ZIG8gOqOHBxmzX5b9Mey-iGBi9w6/view?usp=sharing>

5. Picture of the informal bill :

7	1206601	Noni Capsule	120 caps	594	8.00	546.48	4	1360.00	2185.00
8	1207601	Ore Piles Capsule (Altos)	60 cap	138	8.00	126.96	2	132.00	253.00
Juice Concentrate									
9	2300501	Altos Noni Juice	500 ml	429	8.00	394.68	4	952.00	1578.00
10	2301901	Oregel Syrup	500 ml	439	8.00	403.88	3	738.00	1211.00
Liquid Extract									
11	2502001	Altos Jeewan Shakti Avaleh	500 gm	316	8.00	290.72	2	162.00	581.00
Tablet									
12	3601001	Orecal Calcium Tablet (1x10x10)	100 tab	205	8.00	188.60	1	140.00	188.60
Toothpaste									
13	3901301	Altos Oredent Toothpaste	100 gm	79	8.00	72.68	12	384.00	872.16
14	3902301	Altos Orefresh Toothpaste	100 gm	82	8.00	75.44	12	432.00	905.28
TOTAL							54	8805.00	13745.76
In Words : Rupees Thirteen Thousand Seven Hundred Forty Six Only Payable amount of Rs. 13746.00/- against the FPO amount of Rs. 13746.00/-									
							Total	13745.76	
							Round Figure	0.24	
							Grand Total	13746.00	

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Meta data

For the thirty to forty days between May 30, 2023, and July 10, 2023, daily records for the things sold are included in the data collected for this project. The data is seven months older than the current date.

Since the business is GST registered, all sales are monitored and sent in PDF format for periodic review.

Over 150 rows and seven categories with over 200 goods are tracked in the raw data set. The below snapshot shows the data collected as spreadsheets.

S no	Product name	Price/Unit	Type	Date	Quantity	Final Amount
1	oregon 80	440	Agriculture	30-05-2023	1	404.8
2	Altos Flax oil capsule	549	medical	30-05-2023	2	1010.16
3	Altos hadjob capsule	149	medical	30-05-2023	2	274.16
4	Ganoderma capsule	600	medical	30-05-2023	2	552
5	herbal aroplex capsule	575	medical	30-05-2023	2	1058
6	noni capsule	594	medical	30-05-2023	2	1092.96
7	noni capsule	429	medical	30-05-2023	4	1578.72
8	ore pile capsule	138	medical	30-05-2023	2	253.92
9	altos noni juice	429	juice concentration	01-06-2023	2	789.36
10	Oregel Syrup	439	juice concentration	01-06-2023	3	1211.64
11	Zordon skin Glow cream	155	skin care	01-06-2023	1	102
12	altos abhizyme syrup	113	medical	01-06-2023	6	623.76
13	Altos wheat grass tablets	281	medical	01-06-2023	2	517.04
14	Altos curum plus capsule	1410	medical	02-06-2023	2	1297.2
15	Ganoderma capsule	600	medical	02-06-2023	4	1104
16	herbal aroplex capsule	575	medical	02-06-2023	1	529
17	noni capsule	594	medical	02-06-2023	4	2185.92
18	Altos herbal heena hair pack	68	skin care	02-06-2023	1	62.56
19	ore pile Ointment	70	skin care	02-06-2023	6	386.4

(2.1) snapshots of the spreadsheet

Descriptive Statistics

Key points:

- Total sum of the quantity is 753
- Total sales average amount: Rs.1071.41
- Total sales median: Rs. 809.60
- Item price mean: Rs 390.94
- Item price median: Rs. 316.00
- Count of product types: 192
- Standard deviation of total amount: 932.50

From these measurements, the following can be concluded:

- High standard deviation indicates a considerable spread in sales amount, with the lowest value at ₹35.00 and highest at ₹1040.00.
- In such cases, the median might represent the central value more accurately.
- The item price skewness is 1.74, indicating a strong right skew and the existence of some expensive items.
- Because of this skew, the mean will be biased toward more expensive goods and may not accurately reflect the centre value of majority of the data points.

Detail explanation of analysis process/method

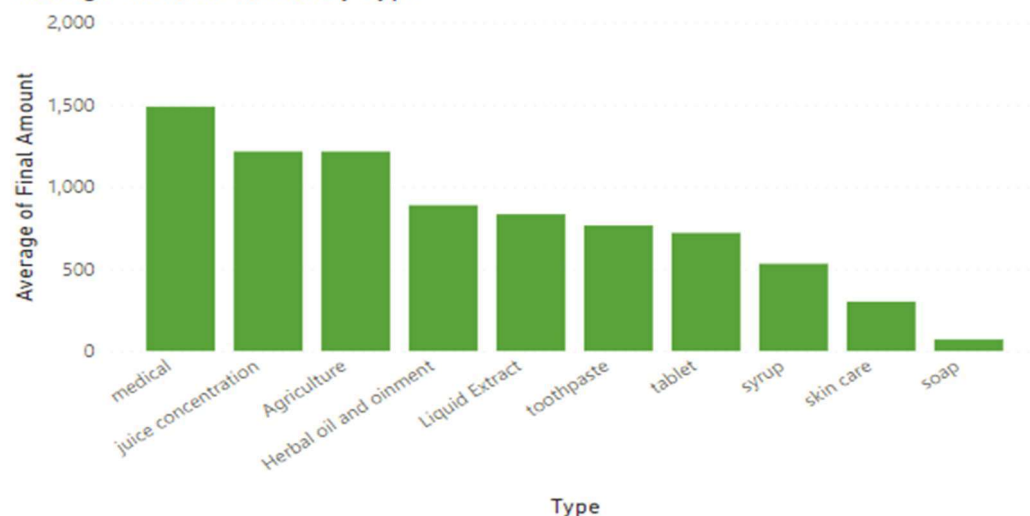
I initially imported the 40 days' worth of data, which was in PDF format, into a Google Sheet that had been appropriately cleaned, filtered, and organized.

To extract more information from the data, I employ a variety of data operations, including total sum, average, median, standard deviation, maximum, and minimum. I visualized several data characteristics using a variety of charts, including column, bar, line, and pie charts, which are detailed below:

- I used the bar chart to determine which categories had profit.
- Pie charts were another tool I used to show the proportion of various SKUs.
- To find out how much stock our shop had, I also counted the names of various products and their quantities using a line chart.
- In addition, I utilized the Funnel chart to see which product categories are selling better than the others.

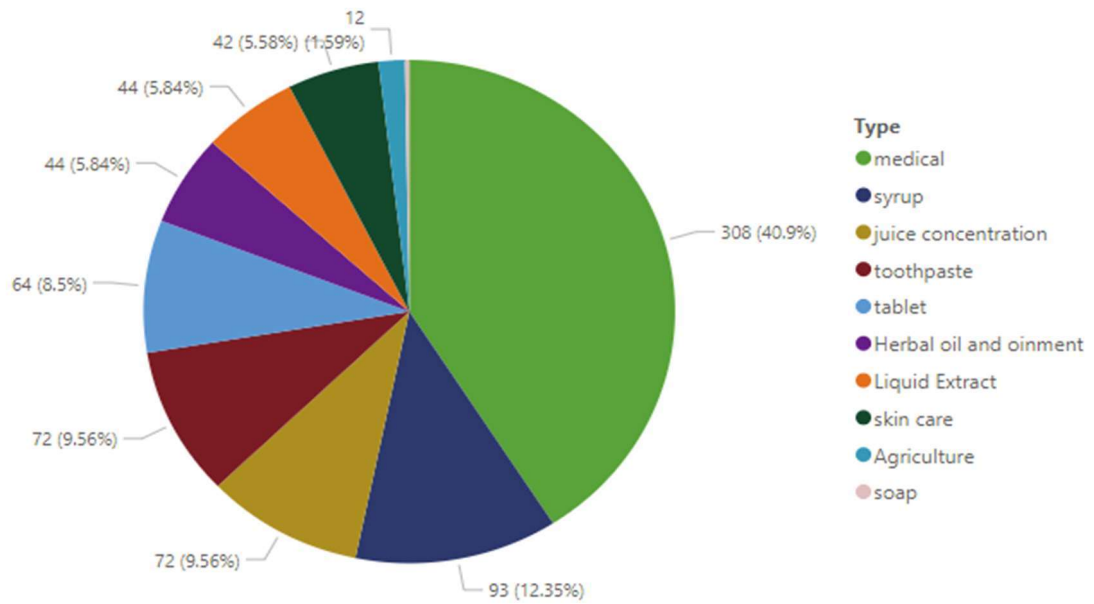
Results and Findings

Average of Final Amount by Type



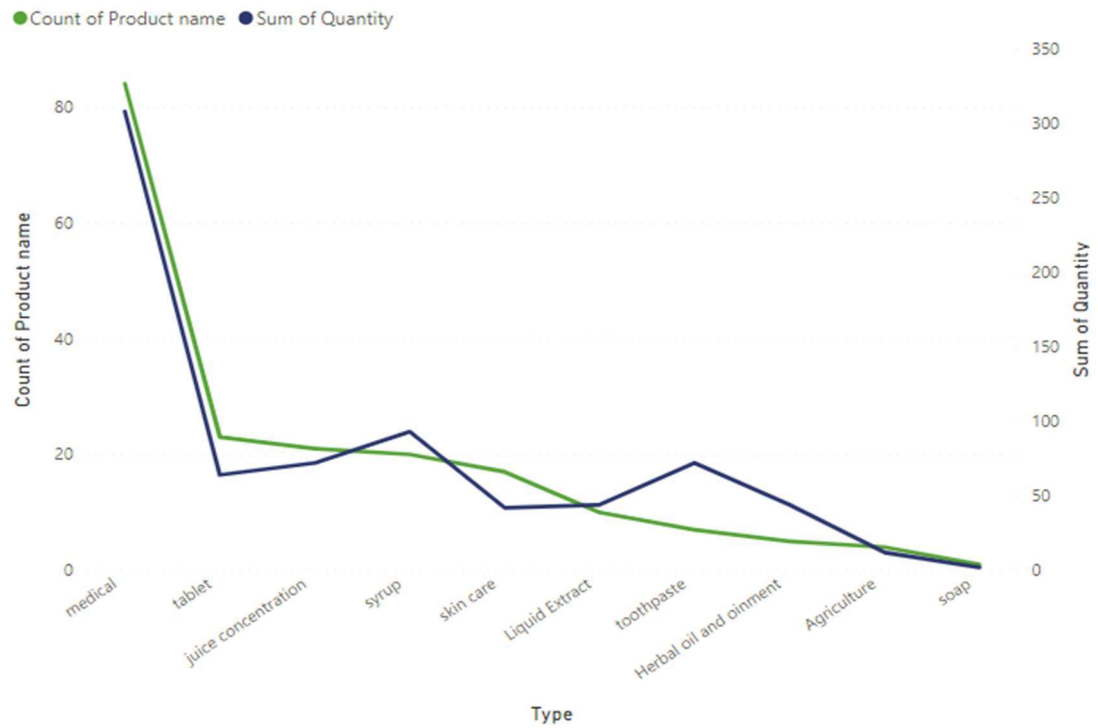
(3.1) profit in different categories

Sum of Quantity by Type

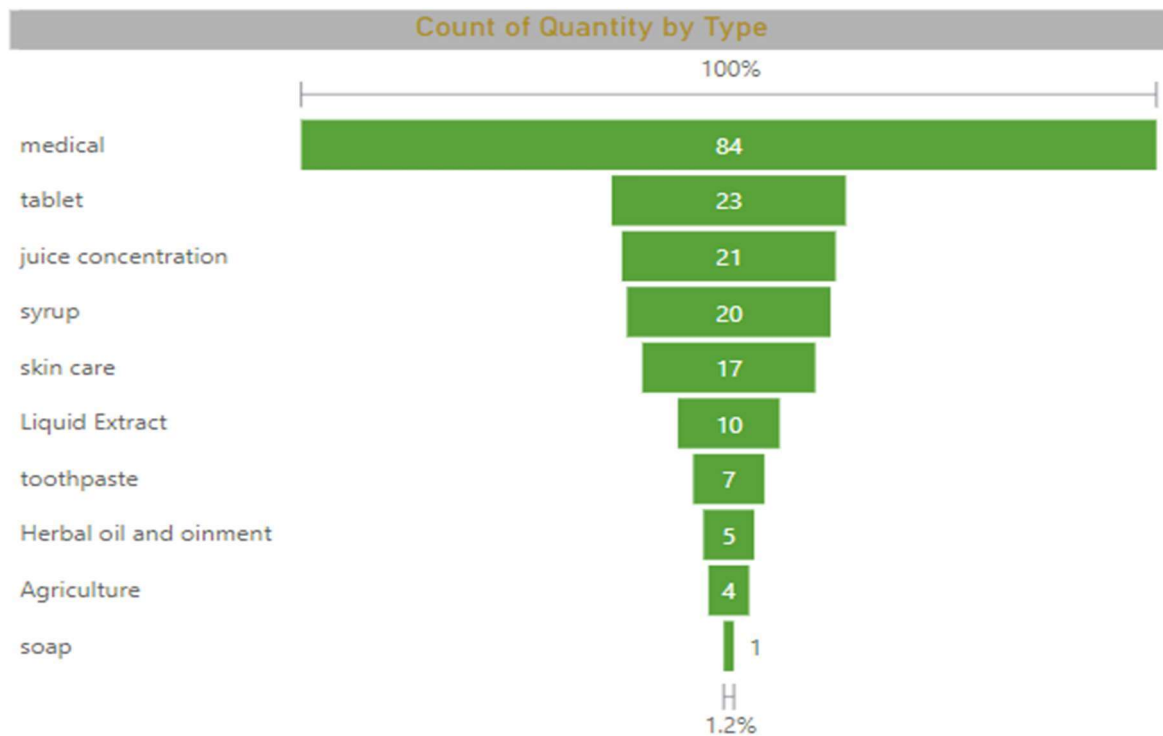


(3.2) Pie Chart depicting contribution of SKUs.

Count of Product name and Sum of Quantity by Type



(3.3) line chart of products and Quantities.



(3.4) Funnel chart showing most shelling categories.

The following are the main conclusion drawn from analysis:

- When compared to other categories, **Medical-type** products are the most popular. At “**Altos Mangalam Enterprises,**” it also brings in the most capital, accounting for *60 per cent of total sales*.
- **Noni Capsules**, which make about **20% of the medical category**, are the most popular shell products in the medical kind.
- The shop can also focus more on **skin care, Hair care** as these products have a low price but are also sold in lower quantities. This can be achieved with regular promotions.
- **Agricultural products** could be quite important for making a lot of money. It cannot meet customers’ needs in a seasonal manner because of *insufficient supplies*.

Thanks for Reading