INDIAN INSTITUE OF TECHNOLOY MADRAS



BUSINESS DATA MANAGEMENT - CAPSTONE PROJECT

21f1002607@student.onlinedegree.iitm.ac.in Bhargav Sharma The analysis is done on small shop named "BALAK RAM &SONS".

Basically the area of business is Groceries such as Pulses, Salt, Flour and different types of Oils etc. Two months of data is collected (1Dec 2021 to 31 Jan 2022) to see variations in revenue, profit and inventories.

Revenue Analysis, Revenue Pareto, Profit Analysis, Profit Pareto and average inventory ratio and graphs on whole dataset is performed.

Sample of data collected:

BALAK RAM &SONS GSTGOODS 5%

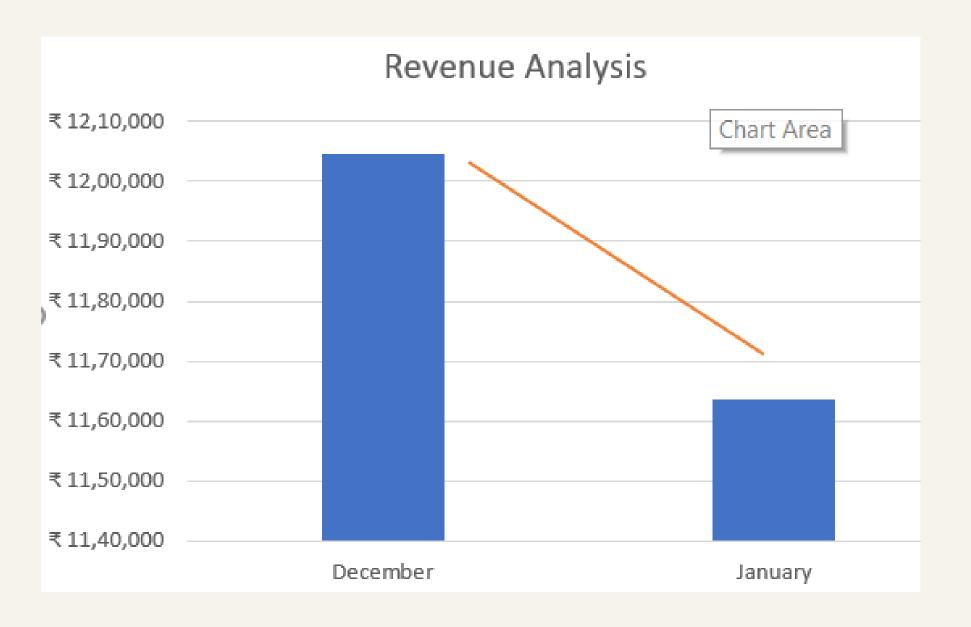
Stock Summary

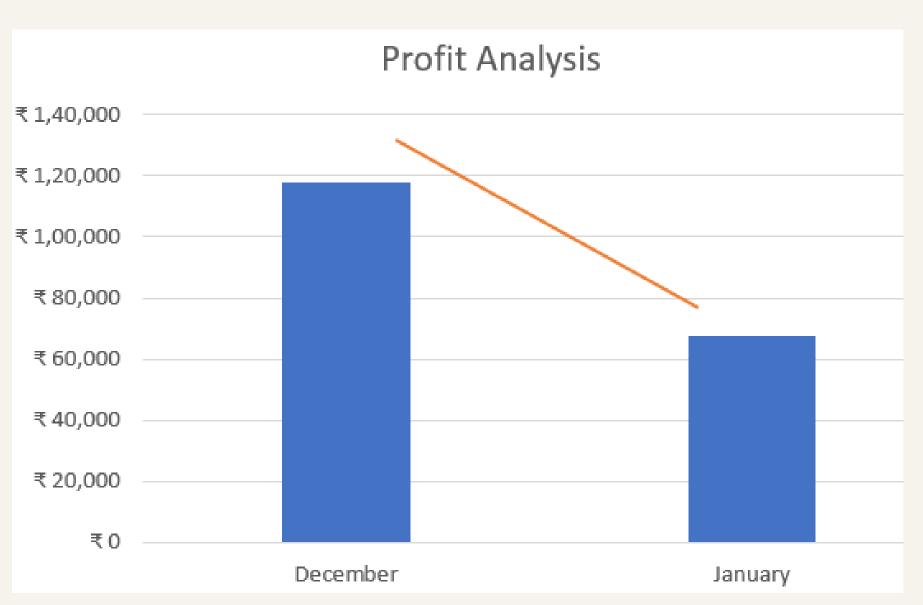
1-Dec-2021 to 31-Dec-2021

| | GSTGOODS 5% | | | | | | | | | | | |
|-----------------|---|---------|----------|-----------|---------|-----------|-----------|-----------------|-----------|------------|---------|----------|
| Particulars | BALAK RAM & SONS 1-Dec-2021 to 31-Dec-2021 | | | | | | | | | | | |
| Taruculais | Opening Balance Inwards Outwards | | | | | | | Closing Balance | | | | |
| | Quantity | Rate | Value | Quantity | Rate | Value | Quantity | Rate | Value | Quantity | Rate | Value |
| Aggarwati | -191 PCS | 7.95 | -1518.94 | • | | | • | • | | -191 PCS | 7.95 | -1518.94 |
| AJWAIN | 102.800 kgs | 147.12 | 15123.90 | | | | 4.500 kgs | 201.33 | 906.00 | 98.300 kgs | 147.08 | 14457.90 |
| Amchoor | 85.100 kgs | 120.48 | 10252.74 | 5.000 kgs | 142.80 | 714.00 | 7.000 kgs | 177.86 | 1245.00 | 83.100 kgs | 121.49 | 10096.02 |
| AMRIT PUFF 15KG | 39 nags | 2048.68 | 79898.49 | 250 nags | 1990.68 | 497668.83 | 244 nags | 2092.62 | 510600.00 | 45 nags | 1978.68 | 89040.41 |

Month wise Revenue and Profit analysis

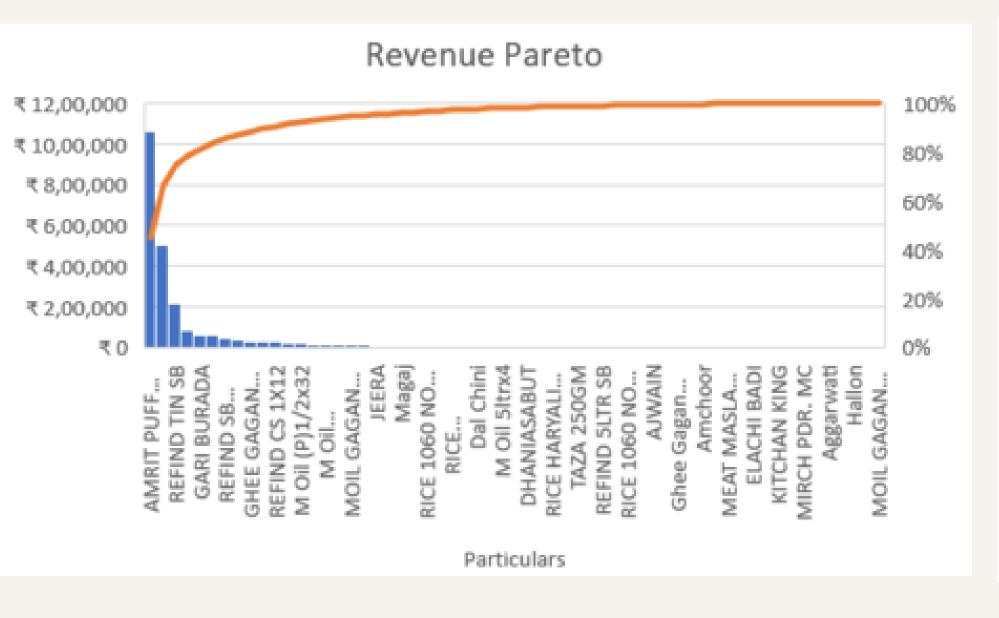
- Revenue and profit both are decreasing in month of January.
- Revenue generated in December Rs.12,04,553 and in January Rs.11,63,541.
- Profit generated in December Rs.1,17,825 and in January Rs.67,598.

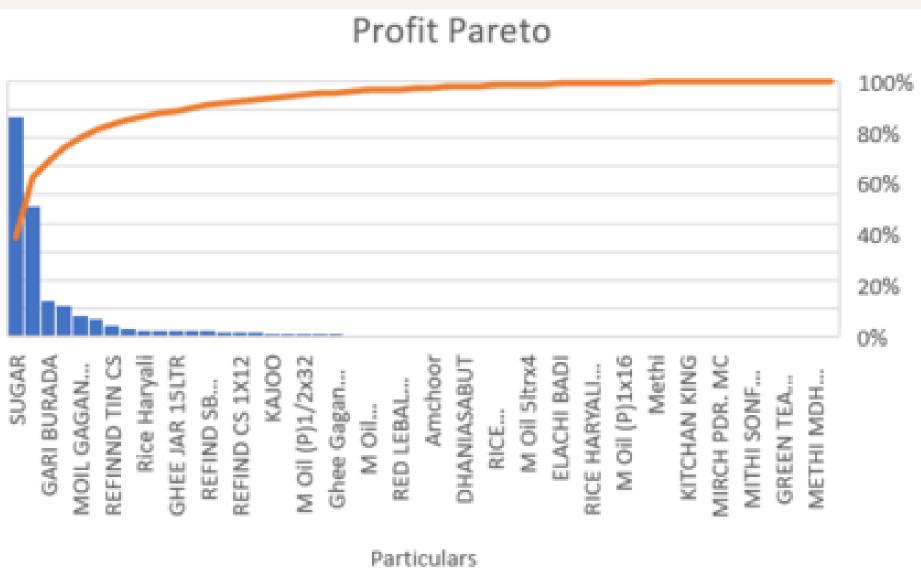




Revenue and Profit Pareto analysis

• Revenue and Profit Pareto both follows strict pareto of approx. 15:85, which means 15% of items are generating approxiamately 85% of revenue.





Average Inventory Ratio of two months

• M Oil(P)1X16 (mustard oil) is fastest moving item with average inventory ratio 8.762,where as there are some items which are not moving at all such as MOIL GAGAN 15LTR,METHI MDH 50G etc.

| Noticulars No | | | |
|--|--------------------|-------------------------|---------------------------|
| REFINID TIN CS 1.367 | Particulars | Average Inventory ratio | |
| REFIND TIN SB | | 8.762 | |
| GHEE JAR 15LTR SUGAR AMRIT PUFF 15KG Dal Chini Magai Magai Moong Faii 0.501 0.7 > Average Moving > 0.372 Rice Haryali 0.614 Fast Moving > 0.372 Rice Haryali 0.372 Rice Haryali 0.38 Slow Moving > 0.38 Slow Moving > 0.38 Slow Moving > 0.39 Rice Haryali DAL GAGAN 1220 MOIL GAGAN 500ML REFIND CS 1X12 REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DA | REFINND TIN CS | 1.367 | |
| SUGAR AMRIT PUFF 15KG Dal Chini Magai Moong Faii Rice Haryali Rice Haryali RICE 1060N035KG GHEE GAGAN 1X20 MOIL GAGAN 500ML REFIND CS 1X12 REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASILA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SC TSB REFIND SC TSB REFIND SC TSB RICE 1660 NO 5KG REFIND SC TSB RICE HARYALI 10 KG GARI BURADA KALI Mirch TAZA 250GM REFIND SC TSB RICE HARYALI 10 KG GARI BURADA KALI MIRCH TAZA 250GM REFIND SC TSB RICE 1660 NO 5KG RED LEBAL 250GM KAJOO RED LEBAL 250GM KAJOO RED LEBAL 250GM | REFIND TIN SB | 1.116 | |
| AMRIT PUFF 15KG Dal Chini Magai Moong Faii D.501 D.372 D.372 D.375 Noverage Moving>=0.3 Bice Haryali BICE 1060NO35KG GHEE GAGAN TX20 MOIL GAGAN 500ML BEFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH DESAN RAJD PKT TAZA 100GM MEAT MASLA MDH D.132 BICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB BICE 1080 NO 5KG RED LEBAL 250GM KAJOO LLACHI CHHOTI DHANIASABUT JEERA HING MDH DOGS MITH SONF LOOSE AJWAIN | GHEE JAR 15LTR | 1.115 | |
| Dal Chini | SUGAR | 0.918 | |
| Magai 0.614 | AMRIT PUFF 15KG | 0.911 | |
| Moong Faii 0.501 0.7 > Average Moving>=0.3 | Dal Chini | 0.651 | |
| Bice Haryali | Magaj | 0.614 | Fast Moving>=0.7 |
| RICE 1060NO35KG GHEE GAGAN 1X20 MOIL GAGAN 500ML REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH O.132 RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH D.0130 RICE MICH MDH MICH 10063 MITHI SONF LOOSE AJWAIN Not moving = 0.00 Not moving = | Moong Faii | 0.501 | 0.7 > Average Moving>=0.3 |
| GHEE GAGAN 1X20 MOIL GAGAN 500ML REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH O.132 RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB RICE 1660 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.297 O.297 O.297 O.297 O.297 O.297 O.207 O.20 | Rice Haryali | 0.372 | 0.3> Slow Moving >0 |
| MOIL GAGAN 500ML REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH O.132 RICE HARYALI 10 KG GARI BURADA Kali Mireh TAZA 250GM REFIND 5 LTR SB RICE 1060 NO 5 KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.295 O.270 O.270 O.271 O.277 O.277 O.277 O.277 O.377 O. | RICE 1060NO35KG | 0.309 | Not moving = 0.00 |
| REFIND CS 1X12 REFIND SB (1X12) CHAT MASALA MDH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN 0.270 0.277 0.277 0.277 0.277 0.277 0.074 0.074 0.063 MITHI SONF LOOSE AJWAIN 0.050 | GHEE GAGAN 1X20 | 0.297 | |
| REFIND SB (1X12) CHAT MASALA MDH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH 0.150 RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN 0.257 0.257 0.257 0.257 0.150 0.150 0.150 0.118 0.100 0.101 0.100 0.101 0.100 0.1 | MOIL GAGAN 500ML | 0.295 | |
| CHAT MASALA MDH DAKH DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH NEET MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO SKG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.163 O.163 O.140 O.140 O.140 O.132 O.118 O.118 O.119 O.109 O.101 O.109 O.101 O.100 | REFIND CS 1X12 | 0.270 | |
| DAKH BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.163 O.163 O.164 O.165 O.160 O.140 O.132 O.118 O.118 O.119 O.119 O.109 O.101 O.1 | REFIND SB (1X12) | 0.257 | |
| BESAN RAJD.PKT TAZA 100GM MEAT MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN 0.140 0.140 0.140 0.140 0.140 0.140 0.132 0.118 0.113 Kali Mirch 0.109 0.101 | CHAT MASALA MDH | 0.214 | |
| TAZA 100GM MEAT MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJVAIN | DAKH | 0.163 | |
| MEAT MASLA MDH RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.132 0.132 0.133 0.113 0.109 0.100 0 | BESAN RAJD.PKT | 0.150 | |
| RICE HARYALI 10 KG GARI BURADA Kali Mirch TAZA 250GM REFIND SLTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN 0.118 0.118 0.113 0.113 0.100 0.101 0.101 0.101 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0. | TAZA 100GM | 0.140 | |
| GARI BURADA Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.100 0.101 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0.101 0.100 0.100 0.100 0.101 0.100 0.100 0.100 0.100 0.101 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00 | MEAT MASLA MDH | 0.132 | |
| Kali Mirch TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJYAIN 0.109 0.0000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.00 | RICE HARYALI 10 KG | 0.118 | |
| TAZA 250GM REFIND 5LTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN 0.101 0.100 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0. | GARI BURADA | 0.113 | |
| REFIND SLTR SB RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH DEGI MICH MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.0000 O.0100 O.0000 | Kali Mirch | 0.109 | |
| RICE 1060 NO 5KG RED LEBAL 250GM KAJOO ILACHI CHHOTI OHANIASABUT JEERA HING MOH DEGI MICH MOH DEGI MICH MOH MITHI SONF LOOSE AJWAIN 0.090 0.089 0.089 0.082 0.077 0.077 0.077 0.077 0.077 0.077 0.077 0.074 0.074 0.074 0.074 0.074 0.074 0.075 | TAZA 250GM | 0.101 | |
| RED LEBAL 250GM KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.089 0.089 0.089 0.082 0.077 0.077 0.077 0.077 0.074 0.074 0.063 MITHI SONF LOOSE AJWAIN 0.050 | REFIND 5LTR SB | 0.100 | |
| KAJOO ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH MITHI SONF LOOSE AJWAIN O.050 O.082 O.077 O.077 O.077 O.077 O.074 O.074 O.063 MITHI SONF LOOSE O.058 | RICE 1060 NO 5KG | 0.090 | |
| ILACHI CHHOTI DHANIASABUT JEERA HING MDH DEGI MICH MDH 0.074 DEGI MICH MDH 0.063 MITHI SONF LOOSE AJWAIN 0.050 | RED LEBAL 250GM | 0.089 | |
| DHANIASABUT JEERA HING MDH DEGI MICH MDH 0.074 DEGI MICH MDH 0.063 MITHI SONF LOOSE AJWAIN 0.050 | KAJOO | 0.082 | |
| JEERA 0.074 HING MDH 0.074 DEGI MICH MDH 0.063 MITHI SONF LOOSE 0.058 AJWAIN 0.050 | ILACHI CHHOTI | 0.077 | |
| HING MDH 0.074 DEGI MICH MDH 0.063 MITHI SONF LOOSE 0.058 AJWAIN 0.050 | DHANIASABUT | 0.077 | |
| DEGI MICH MDH 0.063 MITHI SONF LOOSE 0.058 AJWAIN 0.050 | JEERA | 0.074 | |
| MITHI SONF LOOSE 0.058 AJWAIN 0.050 | HING MDH | 0.074 | |
| AJWAIN 0.050 | DEGI MICH MDH | 0.063 | |
| 0.050 | MITHI SONF LOOSE | 0.058 | |
| Haldi Powder 0.048 | AJWAIN | 0.050 | |
| | Haldi Powder | 0.048 | |

RECOMMENDATIONS

- He should remove non-moving items from stock
- The fastest moving items should always remain in stock.
- Pareto is good enough that 15% of items are generating 85% of revenue and profit so he should focus more on 15% items that are generating highest revenue, these items should always remain in stock.