

Sales and Target Analysis



Problem Statement

An ABC company has the sales data for the last 3 years and they want to analyze it now.

There is a Dimension Data where there is the list of companies and their Line of Business. There are 3 years of sales data. There is also a Target Data.



Dataset

The dataset consists of 3 tables

- **Sales** – This table has sales data for 3 years, 2017 to 2019.
- **Dimensions Table** – This table has 5 sheets
 1. **Customer** – Has information about Customers, Line of Business and City
 2. **Product** – Contains information for Product ID and Group ID
 3. **Product Group** – Gives insights about Group and Category
 4. **SalesPerson** – Has all the information about SalesPerson, Manager, Supervisor and Team
 5. **Dates** – Contains all the dates used in the dataset.
- **Targets** – Targets by Month Year and target by SalesPerson are given here.

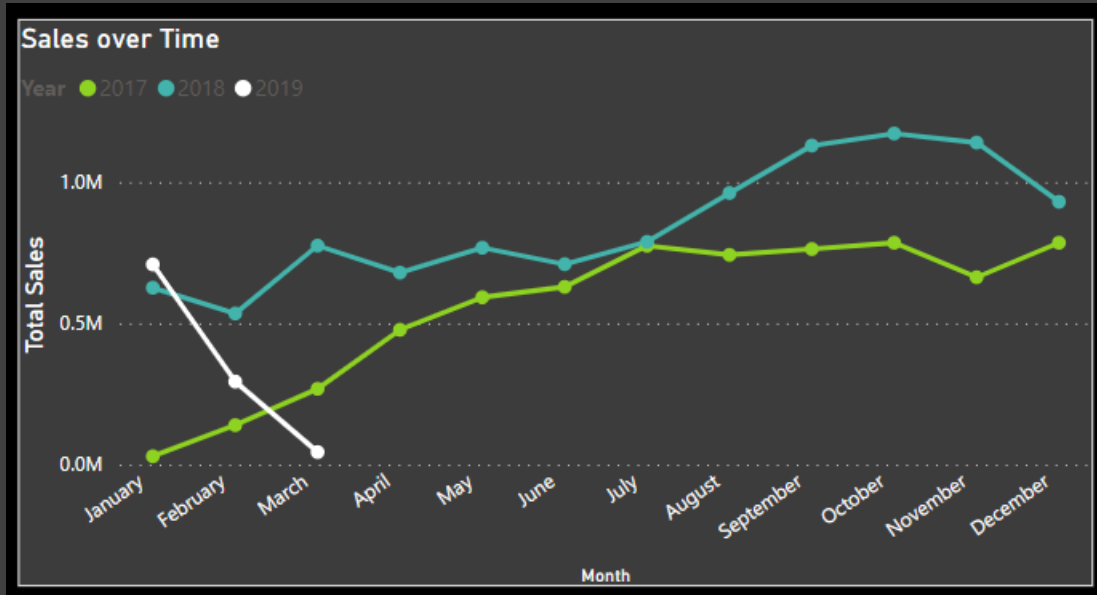


Key Insights

| | | | | | | |
|-----------------------|----------------------------------|----------------------------------|-------------------------|----------------------|------------------------|------------------------------------------|
| 17.91M Total Sales | Jan 2017 Month with Min Sales | Oct 2018 Month with Max Sales | 1273 Total Customers | 6M Total Quantity | 2736 Total Products | Supermarkets Lv3 MAX line of business |
|-----------------------|----------------------------------|----------------------------------|-------------------------|----------------------|------------------------|------------------------------------------|

- **17.91M** is the total sales amount for the entire period whereas the target amount was **23.83M**.
- **Highest sale** was made in **Oct 2018** (1.17M), followed by **Nov 2018** (1.14M) and **Sep 2018** (1.13M)
- Lowest sale was made in **Jan 2017** (29.1K), followed by **Mar 2019** (44.03K) and **Feb 2017** (139.28K)
- Max sales were made by **Supermarkets Lv3** (3.58M) as compared to other lines of business.
- Sales by Category: Drinks, **1.54M** (8.61%) and Food, **16.37M** (91.39%)
- Sales by team: Retail is **8.70M**, Online is **3.11M** whereas Distributors is **6.10M**.
- Sales by Manager: Duane Frame **9.21M** and Ronnie Daly **8.70M**.
- **Sahil Seymour** is the salesperson with highest sale i.e. **4.71M**.

Sales over Time



Sales by Year

2017

6.65M

2018

10.21M

2019

1.05M

Total Sales

17.91M

SalesPerson based insights

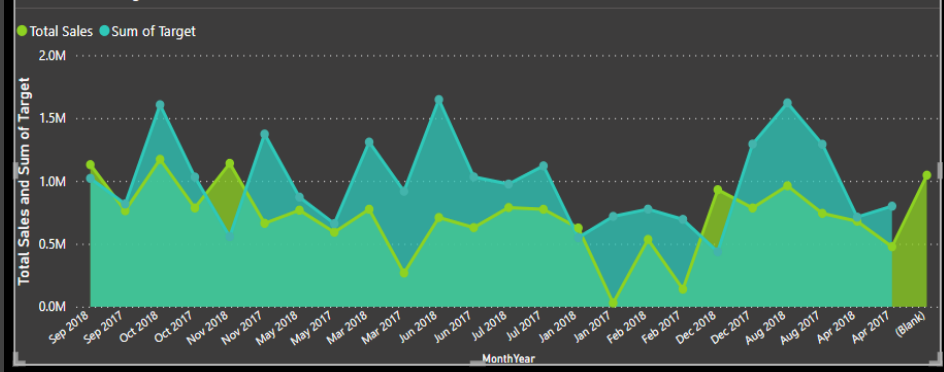
Target vs Actual sales by SalesPerson

| SalesPerson | Total Sales | Target Sales | Manager | Team | Supervisor |
|------------------|----------------------|----------------------|-------------|--------------|------------------------|
| Sahil Seymour | 4,707,402.55 | 5,248,157.73 | Ronnie Daly | Retail | Sarah-Jayne Pennington |
| Shakil Durham | 3,301,482.32 | 3,831,092.76 | Duane Frame | Distributors | Tahmina Vinson |
| Akeel Mcleod | 2,447,136.24 | 2,708,181.70 | Duane Frame | Distributors | Tahmina Vinson |
| Dominykas Bird | 1,676,337.10 | 2,051,039.56 | Duane Frame | Online | Harvey-Lee Solomon |
| Gillian Gonzales | 1,607,711.70 | 2,037,412.81 | Ronnie Daly | Retail | Sarah-Jayne Pennington |
| Hywel Hopkins | 870,301.84 | | Ronnie Daly | Retail | Jessica Valentine |
| Ayaana Mackenzie | 821,424.61 | 1,914,759.38 | Ronnie Daly | Retail | Jonathon Childs |
| Lorenzo Donovan | 785,240.57 | 1,651,724.50 | Duane Frame | Online | Harvey-Lee Solomon |
| Serenity Rich | 664,172.30 | 3,033,956.45 | Ronnie Daly | Retail | Jessica Valentine |
| Tatiana Adamson | 652,072.53 | 882,266.54 | Duane Frame | Online | Harvey-Lee Solomon |
| Kien McGee | 349,897.22 | 428,118.39 | Duane Frame | Distributors | Tahmina Vinson |
| Tess Sanderson | 26,053.51 | 47,873.39 | Ronnie Daly | Retail | Jessica Valentine |
| Total | 17,909,232.49 | 23,834,583.23 | | | |

- Highest sales were made by salesperson **Sahil Seymour** (4.71M), followed by **Shakil Durham** (3.30M) and **Akeel Mcleod** (2.45M)
- Duane Frame** is the manager with highest sales (9.21M).
- Top 3 Supervisors by sales are **Tahmina Vinson** (4.39M) followed by **Sarah-Jayne Pennington** (3.66M) and **Jessica Valentine** (1.20M).
- Retail team** (8.70M) is the top team by sales.

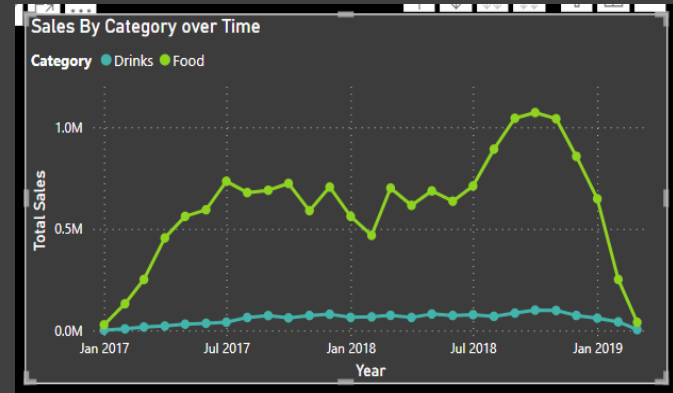
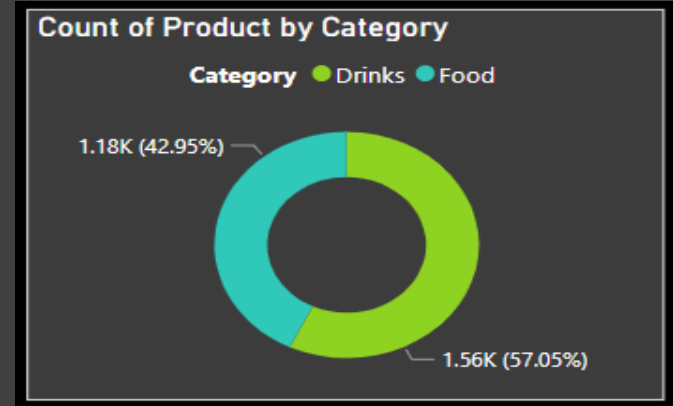
- In Jan 2018, Sep 2018, Nov 2018 and Dec 2018, total sales were over the target sales
- In Sep 2017, Oct 2017, May 2017, April 2018 and May 2018, total sales were close to target sales
- Whereas in all other months, total sales were significantly lower than the target sales.

Actual Vs Target Sales over Time

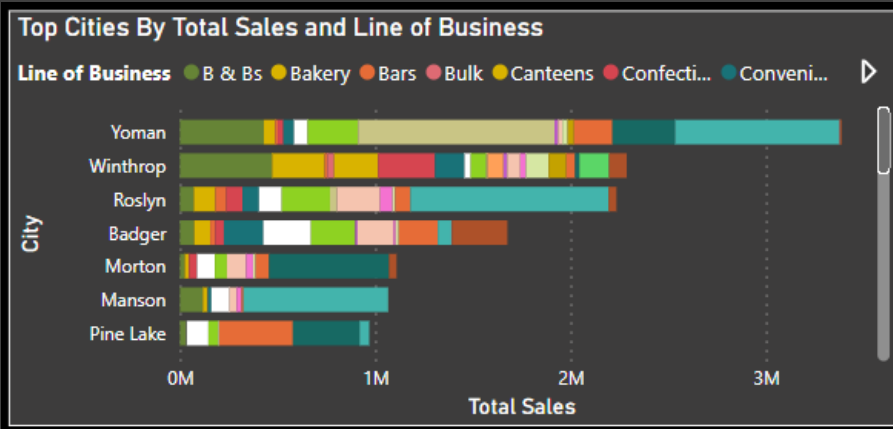


Product based insights

- At 4,473,240.84, **Wheat Flours** had the highest Total Sales whereas **Tomato Sauces**, had the lowest Total Sales at 1,932.68.
- Count of Product for **Drinks** (1,561) was higher than **Food** (1,175). Drinks accounted for 57.05% of Count of Product.
- Between January 2017 and March 2019, 2017 had the largest increase in Sum of Qty Items (2,412.96%) while 2019 had the largest decrease (95.19%).
- Total Sales by category was highest in month **Oct 2018**. Total Sales for Drinks started trending down on December 2018, falling by 94.28% (69,428.11) in 3 months.



Customer based insights



- Top cities by sales are **Yoman** is the city with highest sales (3.39M) followed by **Winthrop** (2.3M), **Roslyn** (2.2M), **Badger** (1.7M), **Morton** (1.1M) etc.
- MarketLv1** has maximum number of customers (180) over any other Line of Business.
- Top line of business is **Supermarkets Lv3** (3.58M), Followed by B & Bs (1.9M), **Supermarkets Lv2** (1.8M), **Distributors Lv1** (1.6M) , **Distributors Lv2** (1.45M) and so on.
- Dragon walk** located at Yoman city has the maximum sales (9.5M) whereas **Tortoisecurity** has the lowest sales(49.80).

Sales by Company, Status, City and Line of Business

| Company Name | Total Sales | Status | City | Line of Business |
|-------------------|----------------------|--------|----------|------------------|
| Dragon walk | 951,003.10 | A | Yoman | Distributors Lv3 |
| Red beat | 678,467.37 | A | Roslyn | Supermarkets Lv3 |
| Prophecy Lighting | 359,452.64 | A | Manson | Supermarkets Lv3 |
| Beta dream | 335,045.33 | A | Yoman | Supermarkets Lv3 |
| Ceasar Softwares | 311,076.76 | A | Morton | Supermarkets Lv2 |
| Leopard Records | 302,892.30 | A | Morton | Supermarkets Lv2 |
| Blossom Arts | 279,007.26 | A | Winthrop | Confectioners |
| Total | 17,909,232.49 | | | |

Conclusion

- Overall, 2017 was the best year by sales and 2019 has the lowest sales where sales starts dropping in the month Feb 2019.
- Sales for Food is more than Drinks.
- No SalesPerson was able to meet the Targets.
- Drinks category has a greater number of products than Food.
- 1364 customers are Active whereas number of Inactive customers are 47.
- Highest unit price and items sold were recorded in Oct 2018.



Thank you