Purpose:

To visualize the sales trends and KPIs of a particular product sold at a large retail store to evaluate product performance.

Timeline:

30 December 2013 to 16 November 2016

About the data:

|  |  |  |
| --- | --- | --- |
| Column | Description | Data type |
| Date | The day on which the sales occurred | DATE |
| Sales | Total Rand value of the sales that occurred | NUMBER |
| Cost of sales | Total Rand value of the cost of sales that occurred | NUMBER |
| Quantity sold | Total number of units that have been sold | NUMBER |

* Data collection: Data collected from the point of sales of the tills at a large retail store. The data of one product from the store was extracted from the large dataset
* Data Transformation: the data has been standardized to ensure that data in each column is of the same data type and rounded off to only 2 decimal places.

Methodology:

Platforms used:

* Excel
* Snowflake
* Word
* PowerPoint

Create new columns that calculate the metrics and KPI’s for the product

|  |  |
| --- | --- |
| Metric | Formula |
| sales price per unit | Sales/quantity sold |
| average unit sales price | SUM(sales price per unit)/SUM(quantity sold) |
| Gross profit | Sales - cost of sales |
| % Gross profit | (Gross profit/sales)\*100 |
| % gross profit per unit | Gross profit per unit\*100 |
| Discount | Sales - sales per unit price |
| Price elasticity |  |
|  |  |

Data analysis

* average unit sales price of this product will determine if the product price is effective
* can determine the profitability of the product(profit margins)
* can be used to forecast future revenue and product selling price
* the product elasticity of demand will explain changes in quantity sold, product price as well as demand for the product
* the gross profit will indicate whether the product is profitable and should be kept on

Recommendations

* whether the store should keep the product on its shelves and whether they should change the selling price
* when they should run promotions on the product