

DA Assignment-1

Name: Sujan Kumar Sollety

Reg No: 21BCE5667

Campus: VIT-Chennai

1. Upload the dataset to Cognos Analytics, delete the unnecessary columns, create a data module, explore and visualize the dataset

1. Removed Unnecessary Columns:

Customer type: *This attribute might not be essential for analyzing product trends and sales patterns*

Gender: *Similar to customer type, gender might not significantly impact product trends or sales patterns. It's not directly related to the products purchased.*

COGS (Cost of Goods Sold): *While this attribute is important for calculating the gross margin and gross income, it might not be necessary to include in the dataset if your primary focus is on customer behavior, product trends, and sales patterns.*

Gross margin percentage: *This attribute can be calculated using the COGS and total values. Since you already have the COGS and total price information, including the gross margin percentage might be redundant.*

Gross income: *Similar to the gross margin percentage, this attribute can be calculated using the COGS and total values. Including it separately might be redundant.*

2.Created Data Module Named Assignment1 Data Module.

The screenshot shows the IBM Cognos Analytics interface. The top bar indicates the current data module is 'Assignment1 data module'. The left sidebar shows a tree view of the data module structure, including a search bar and a list of rows. The main area displays a grid view of the data, with columns for Row Id, Invoice ID, Branch, City, Product line, Unit price, and Quantity. The data is organized into 13 rows, each representing a different invoice.

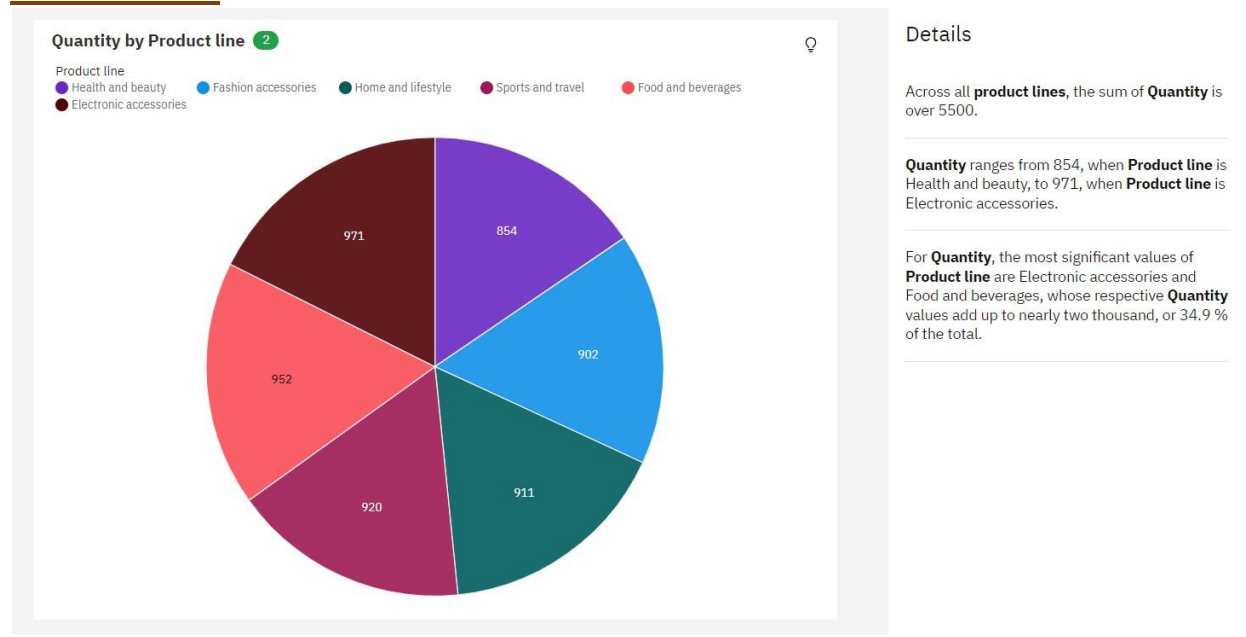
Row Id	Invoice ID	Branch	City	Product line	Unit price	Quantity
1	750-67-8428	A	Yangon	Health and beauty	74.69	7
2	226-31-3081	C	Naypyitaw	Electronic accessories	15.28	5
3	631-41-3108	A	Yangon	Home and lifestyle	46.33	7
4	123-19-1176	A	Yangon	Health and beauty	58.22	8
5	373-73-7910	A	Yangon	Sports and travel	86.31	7
6	699-14-3026	C	Naypyitaw	Electronic accessories	85.39	7
7	355-53-5943	A	Yangon	Electronic accessories	68.84	6
8	315-22-5665	C	Naypyitaw	Home and lifestyle	73.56	10
9	665-32-9167	A	Yangon	Health and beauty	36.26	2
10	692-92-5582	B	Mandalay	Food and beverages	54.84	3
11	351-62-0822	B	Mandalay	Fashion accessories	14.48	4
12	529-56-3974	B	Mandalay	Electronic accessories	25.51	4
13	365-64-0515	A	Yangon	Electronic accessories	46.95	5

3. exploring and visualizing the dataset

BAR CHART:



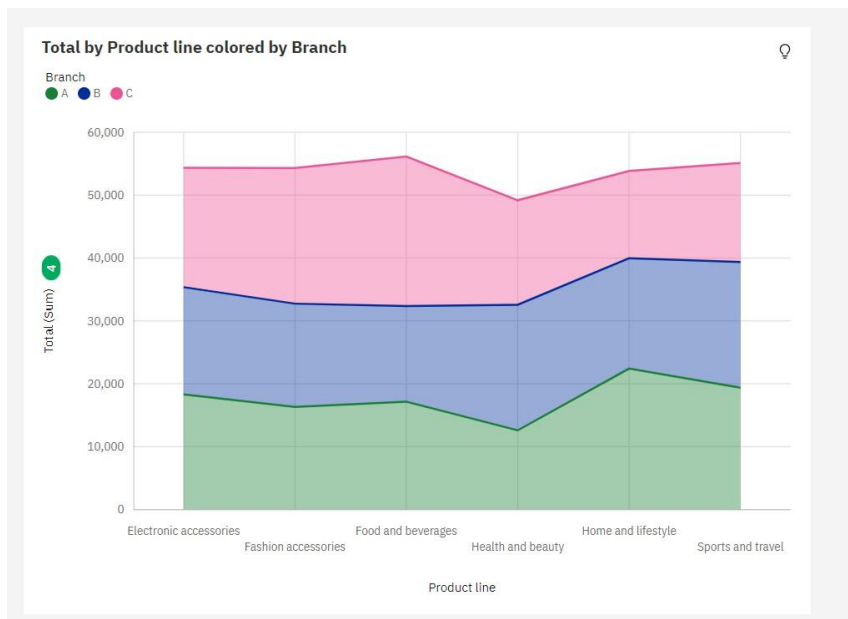
PIE CHART:



COLUMN CHART:



AREA CHART:



Details

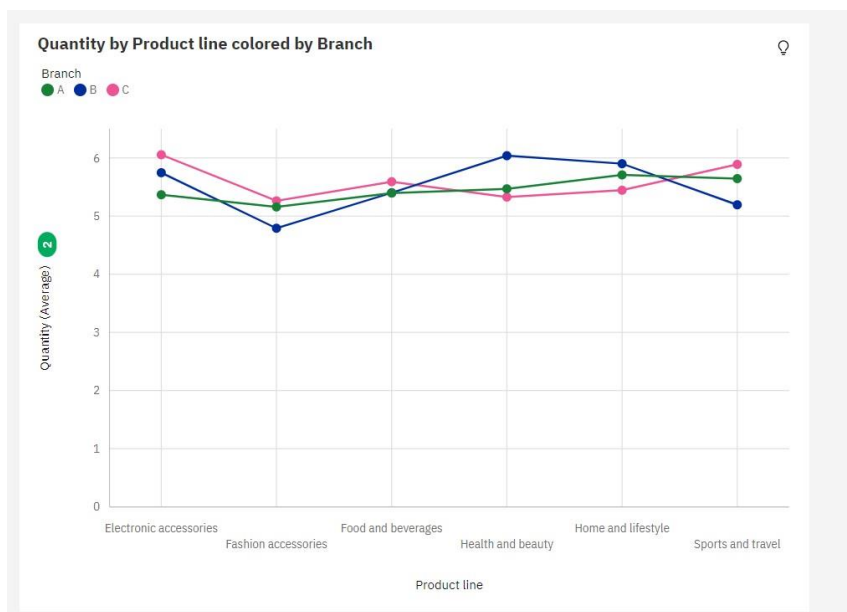
Over all **product lines** and **branches**, the sum of **Total** is nearly 323 thousand.

The summed values of **Total** range from nearly 13 thousand to almost 24 thousand.

For **Total**, the most significant value of **Branch** is C, whose respective **Total** values add up to nearly 111 thousand, or 34.2 % of the total.

For **Total**, the most significant values of **Product line** are Food and beverages, Sports and travel, Electronic accessories, Fashion accessories, and Home and lifestyle, whose respective **Total** values add up to almost 274 thousand, or 84.8 % of the total.

LINE CHART:



Details

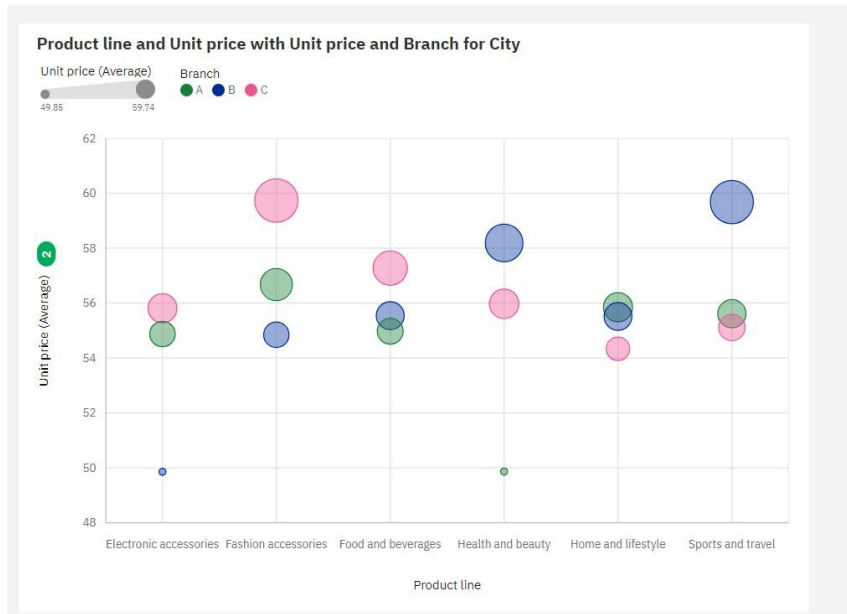
Over all **product lines** and **branches**, the average of **Quantity** is 5.51.

The average values of **Quantity** range from 4.79 to 6.055.

Fashion accessories (17.8 %), Food and beverages (17.4 %), Electronic accessories (17 %), Sports and travel (16.6 %), and Home and lifestyle (16 %) are the most frequently occurring categories of **Product line** with a combined count of 848 items with **Quantity** values (84.8 % of the total) .

A is the most frequently occurring category of **Branch** with a count of 340 items with **Quantity** values (34 % of the total).

BUBBLE CHART:



Details

The overall number of results for **Unit price** is a thousand.

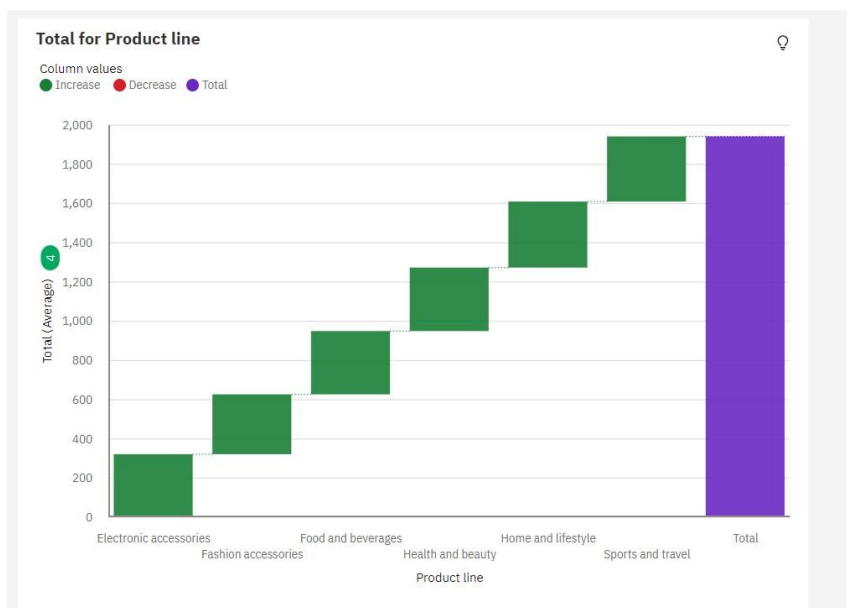
Over all **product lines** and **branches**, the average of **Unit price** is 55.67.

The average values of **Unit price** range from 49.85 to 59.74.

A is the most frequently occurring category of **Branch** with a count of 340 items with **Unit price** values (34 % of the total).

Fashion accessories (17.8 %), Food and beverages (17.4 %), Electronic accessories (17 %), Sports and travel (16.6 %), and Home and lifestyle (16 %) are the most frequently occurring categories of **Product line** with a combined count of 848 items with **Unit price** values (84.8 % of the total) .

WATERFALL CHART:



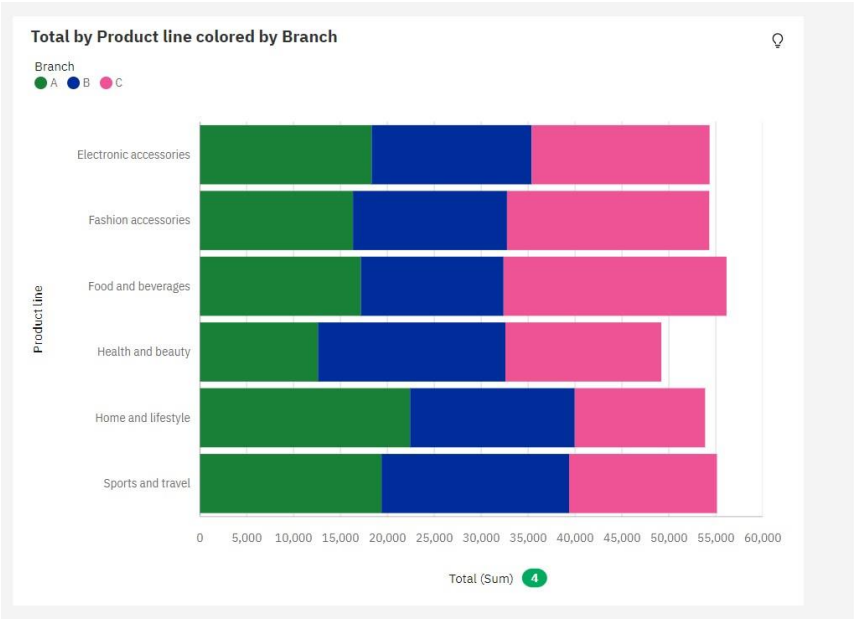
Details

Over all **product lines**, the average of **Total** is 323.

The average values of **Total** range from 305.1, occurring when **Product line** is Fashion accessories, to 336.6, when **Product line** is Home and lifestyle.

Fashion accessories (17.8 %), Food and beverages (17.4 %), Electronic accessories (17 %), Sports and travel (16.6 %), and Home and lifestyle (16 %) are the most frequently occurring categories of **Product line** with a combined count of 848 items with **Total** values (84.8 % of the total) .

STACKED BAR CHART:



Details

Over all **product lines** and **branches**, the sum of **Total** is nearly 323 thousand.

The summed values of **Total** range from nearly 13 thousand to almost 24 thousand.

For **Total**, the most significant values of **Product line** are Food and beverages, Sports and travel, Electronic accessories, Fashion accessories, and Home and lifestyle, whose respective **Total** values add up to almost 274 thousand, or 84.8 % of the total.

For **Total**, the most significant value of **Branch** is C, whose respective **Total** values add up to nearly 111 thousand, or 34.2 % of the total.

THE END