

ASSIGNMENT 1

IBM COGNOS DATA ANALYTICS

SHREYA SHAMEJ

21BCE8432

Shreya.21bce8432@vitapstudent.ac.in

AIM: The growth of supermarkets in most populated cities is increasing and market competitions are also high. The dataset is one of the historical sales of supermarket company which has recorded in 3 different branches for 3 months data. Predictive data analytics methods are easy to apply to this dataset.

Given the context of your predictive data analytics project for historical sales data of a supermarket company.

CHALLENGE:

Upload the dataset to Cognos Analytics

Select sources

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- ASSIGNMENTS
8/31/2023, 9:40 AM
- exploration
8/31/2023, 9:42 AM
- Sample - Superstore.xls
8/31/2023, 5:31 AM
- supermarket_sales - Sheet1.csv
8/31/2023, 8:17 AM
- Superstore data module
8/31/2023, 6:21 AM

Filter by

Reset filters

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- ☐ Files
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Modified

- ☒ All
- ☐ Today
- ☐ Yesterday
- ☐ Past week
- ☐ Past month

Delete the unnecessary columns

Data module

Grid Relationships Custom tables

Row Id	Invoice ID	Branch	Customer type	Product line	Unit price	Quantity
1	750-67-8428	A	Member	Health and beauty	74.69	7
4	123-19-1176	A	Member	Health and beauty	58.22	8
7	355-53-5943	A	Member	Electronic accessories	68.84	6
9	665-32-9167	A	Member	Health and beauty	36.26	2
17	656-95-9349	A	Member	Health and beauty	68.93	7
25	549-59-1358	A	Member	Sports and travel	88.63	3
26	227-03-5010	A	Member	Home and lifestyle	52.59	8
37	129-29-8530	A	Member	Sports and travel	62.62	5
52	162-48-8011	A	Member	Food and beverages	44.59	5
57	106-35-6779	A	Member	Home and lifestyle	44.34	2
59	817-48-8732	A	Member	Home and lifestyle	72.35	10
64	199-75-8169	A	Member	Sports and travel	15.81	10
66	877-22-3308	A	Member	Health and beauty	15.87	10
70	382-03-4532	A	Member	Health and beauty	18.33	1
78	381-20-0914	A	Member	Fashion accessories	20.01	9

City: Since you've mentioned that the company has branches, the city information might not be crucial if you're focusing on branch-level analysis.

Gender: In most cases, gender might not strongly influence overall sales predictions.

Tax: While tax is relevant to the total price, including it in the analysis might not add much predictive value.

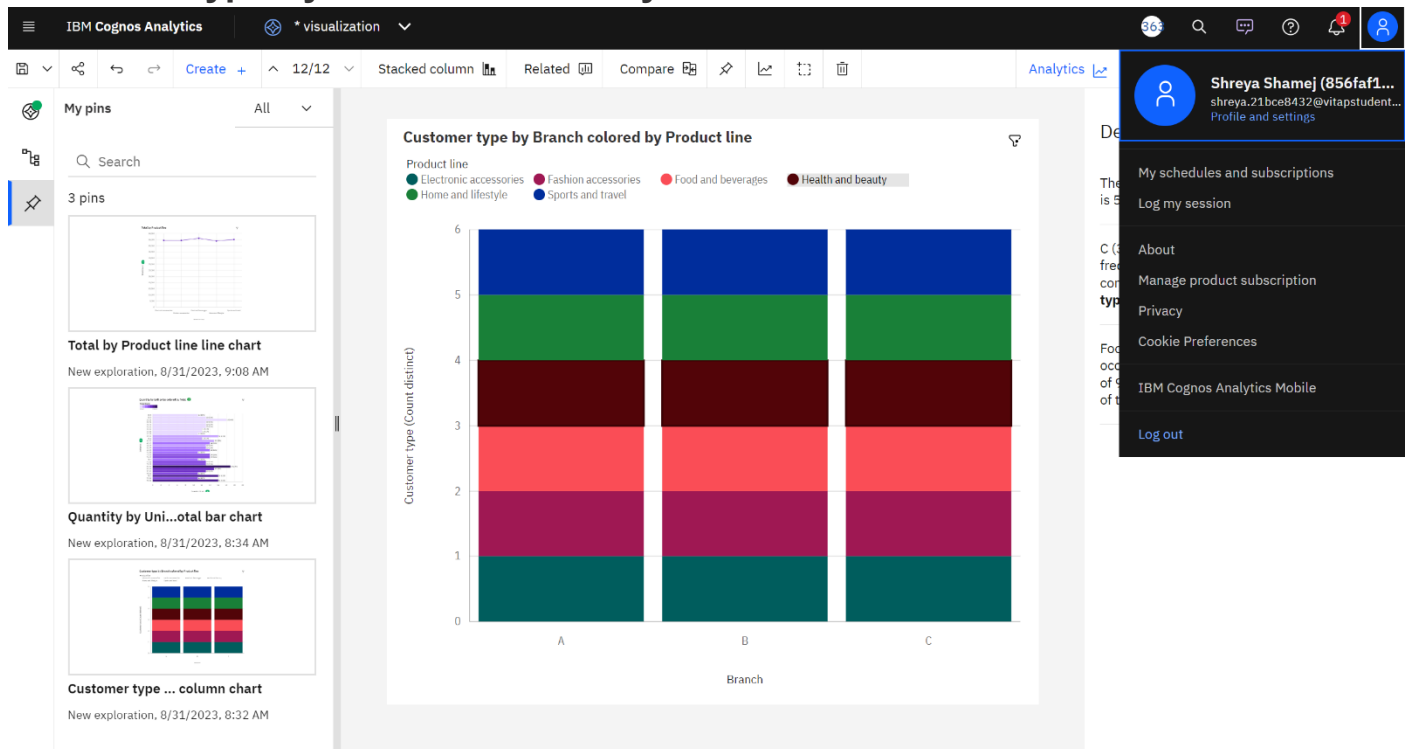
Time: If you're looking at broader trends and patterns, specific purchase times might not be necessary.

create a data module, explore and visualize the dataset.

Now arrange the columns in ascending order.

EXPLORE AND VISUALIZE THE DATA

Customer type by Branch colored by Product line.

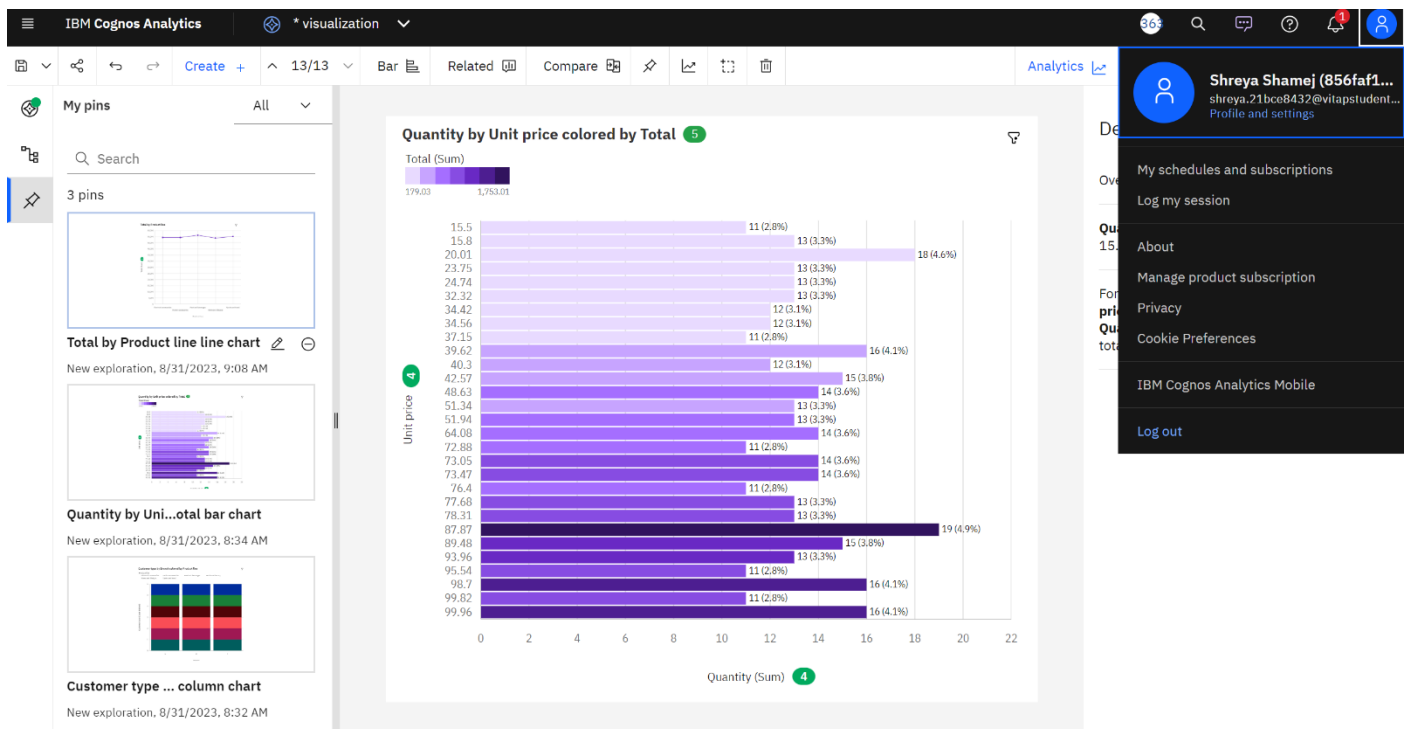


The overall number of results for Customer type is 501.

C (33.7 %) and A (33.3 %) are the most frequently occurring categories of Branch with a combined count of 336 items with Customer type values (67.1 % of the total).

Food and beverages is the most frequently occurring category of Product line with a count of 94 items with Customer type values (18.8 % of the total).

Quantity by Unit price coloured by Total

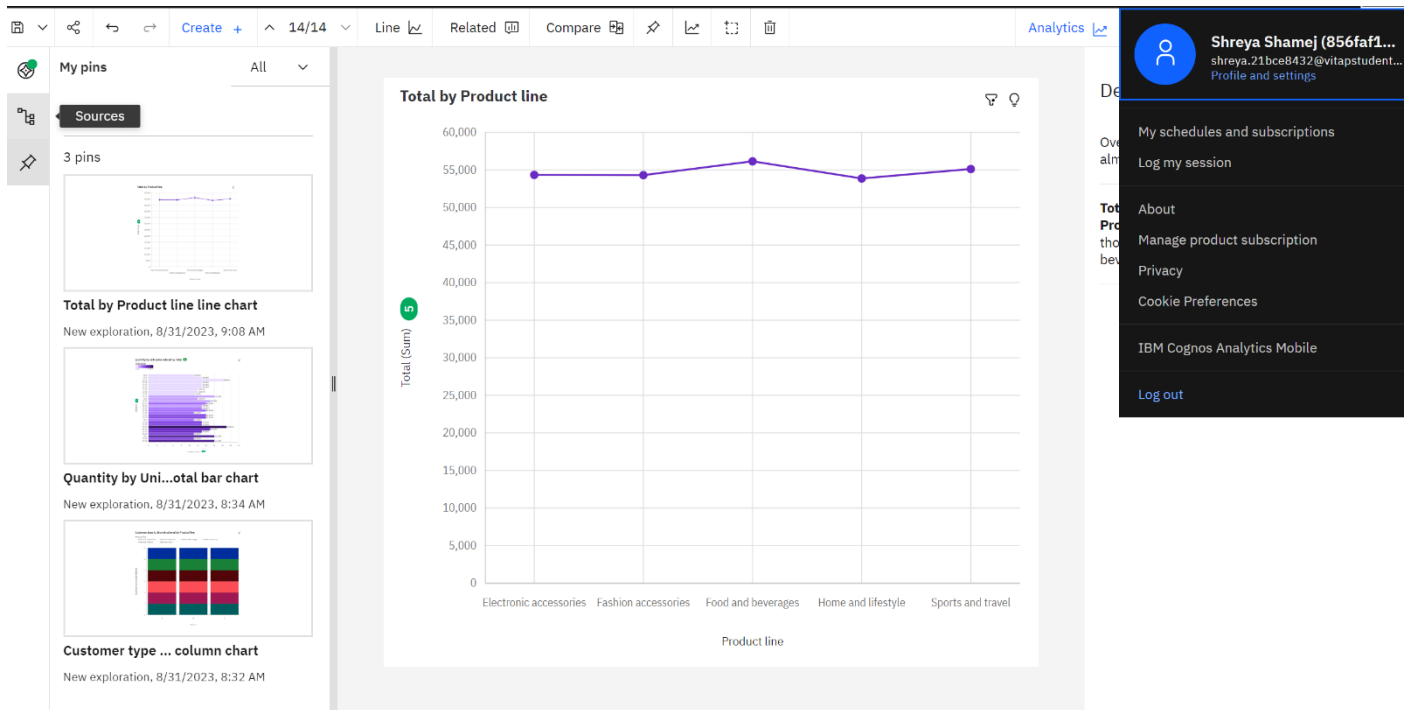


Over all unit prices, the sum of Quantity is 390.

Quantity ranges from 11, when Unit price is 15.5, to 19, when Unit price is 87.87.

For Quantity, the most significant values of Unit price are 87.87 and 20.01, whose respective Quantity values add up to 37, or 9.5 % of the total.

Total by Product line



Over all product lines, the sum of Total is almost 274 thousand.

Total ranges from almost 54 thousand, when Product line is Home and lifestyle, to over 56 thousand, when Product line is Food and beverages.