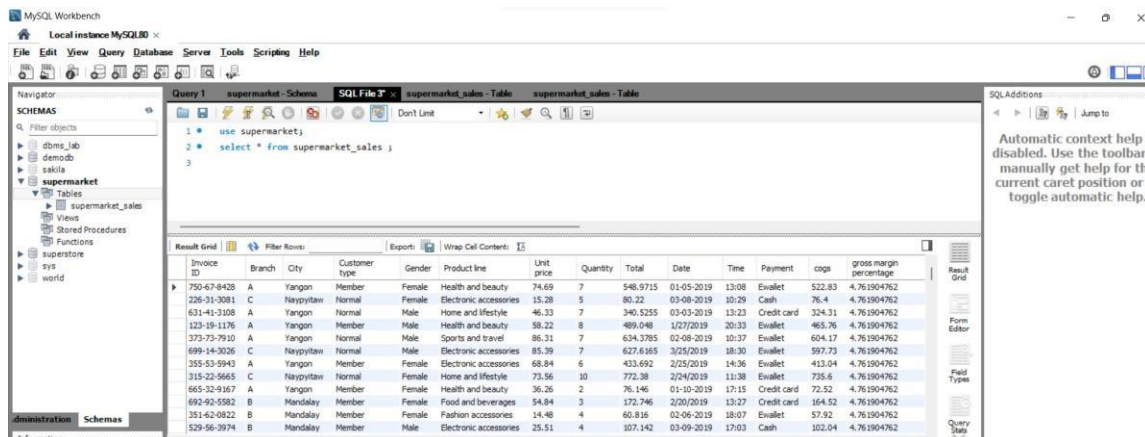


IBM COGNOS DATA ANALYTICS ASSIGNMENT-3

Name: Samanvitha Yadla

Reg no: 21BCB7054

➤ Uploading data into MySQL



➤ Data cleaning

1. Since columns Tax5% and gross income have the same values, we can remove any of the columns so column Tax5% is deleted

Before :

Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating
Member	Female	Health and beauty	74.69	7	26.1415	548.9715	1/5/2019	13:08	Ewallet	522.83	4.761904762	26.1415	9.1
Member	Female	Electronic accessories	15.28	5	3.82	80.22	3/8/2019	10:29	Cash	76.4	4.761904762	3.82	9.6
Member	Male	Home and lifestyle	46.33	7	16.2155	340.5255	3/3/2019	13:23	Credit card	324.31	4.761904762	16.2155	7.4
Member	Male	Health and beauty	58.22	8	23.288	489.048	1/27/2019	20:33	Ewallet	465.76	4.761904762	23.288	8.4
Member	Male	Sports and travel	86.31	7	30.2085	634.3785	2/8/2019	10:37	Ewallet	604.17	4.761904762	30.2085	5.3
Member	Male	Electronic accessories	85.39	7	29.8865	627.6165	3/25/2019	18:30	Ewallet	597.73	4.761904762	29.8865	4.1
Member	Female	Electronic accessories	68.84	6	20.652	433.692	2/25/2019	14:36	Ewallet	413.04	4.761904762	20.652	5.8
Member	Female	Home and lifestyle	73.56	10	36.78	772.38	2/24/2019	11:38	Ewallet	735.6	4.761904762	36.78	8
Member	Female	Health and beauty	36.26	2	3.626	76.146	1/10/2019	17:15	Credit card	72.52	4.761904762	3.626	7.2
Member	Female	Food and beverages	54.84	3	8.226	172.746	2/20/2019	13:27	Credit card	164.52	4.761904762	8.226	5.9
Member	Female	Fashion accessories	14.48	4	2.896	60.816	2/6/2019	18:07	Ewallet	57.92	4.761904762	2.896	4.5
Member	Male	Electronic accessories	25.51	4	5.102	107.142	3/9/2019	17:03	Cash	102.04	4.761904762	5.102	6.8

After:

```
3 alter table supermarket_sales drop column `Tax5%`;
4 select * from supermarket_sales;
5
```

Customer type	Gender	Product line	Unit price	Quantity	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating
Member	Female	Health and beauty	74.69	7	548.9715	01-05-2019	13:08	Ewallet	522.83	4.761904762	26.1415	9.1
Member	Female	Electronic accessories	15.28	5	80.22	03-08-2019	10:29	Cash	76.4	4.761904762	3.82	9.6
Member	Male	Home and lifestyle	46.33	7	340.5255	03-03-2019	13:23	Credit card	324.31	4.761904762	16.2155	7.4
Member	Male	Health and beauty	58.22	8	489.048	1/27/2019	20:33	Ewallet	465.76	4.761904762	23.288	8.4
Member	Male	Sports and travel	86.31	7	634.3785	02-08-2019	10:37	Ewallet	604.17	4.761904762	30.2085	5.3
Member	Male	Electronic accessories	85.39	7	627.6165	3/25/2019	18:30	Ewallet	597.73	4.761904762	29.8865	4.1
Member	Female	Electronic accessories	68.84	6	433.692	2/25/2019	14:36	Ewallet	413.04	4.761904762	20.652	5.8
Member	Female	Home and lifestyle	73.56	10	772.38	2/24/2019	11:38	Ewallet	735.6	4.761904762	36.78	8
Member	Female	Health and beauty	36.26	2	76.146	01-10-2019	17:15	Credit card	72.52	4.761904762	3.626	7.2
Member	Female	Food and beverages	54.84	3	172.746	2/20/2019	13:27	Credit card	164.52	4.761904762	8.226	5.9
Member	Female	Fashion accessories	14.48	4	60.816	02-06-2019	18:07	Ewallet	57.92	4.761904762	2.896	4.5
Member	Male	Electronic accessories	25.51	4	107.142	03-09-2019	17:03	Cash	102.04	4.761904762	5.102	6.8

2. Renamed column 'gross income' to 'revenue'

1 • use supermarket;
 2 • select * from supermarket_sales ;
 3 • alter table supermarket_sales drop column `Tax5%`;
 4 • alter table `supermarket_sales`
 5 change column `gross income` `Revenue` varchar(20) ;
 6

Result Grid | Filter Rows: | Export: | Wrap Cell Contents: |

City	Customer type	Gender	Product line	Unit price	Quantity	Total	Date	Time	Payment	cogs	gross margin percentage	Revenue	Rating
Yangon	Normal	Male	Food and beverages	54.67	3	172.2105	1/21/2019	18:00	Credit card	164.01	4.761904762	8.2005	8.6
andalay	Normal	Female	Home and lifestyle	40.3	2	84.63	03-11-2019	15:30	Ewallet	80.6	4.761904762	4.03	4.4
Naypyitaw	Member	Male	Electronic accessories	86.04	5	451.71	2/25/2019	11:24	Ewallet	430.2	4.761904762	21.51	4.8
andalay	Normal	Male	Health and beauty	87.98	3	277.137	03-05-2019	10:40	Ewallet	263.94	4.761904762	13.197	5.1
andalay	Normal	Male	Home and lifestyle	33.2	2	69.72	3/15/2019	12:20	Credit card	66.4	4.761904762	3.32	4.4
Yangon	Normal	Male	Electronic accessories	34.56	5	181.44	2/17/2019	11:15	Ewallet	172.8	4.761904762	8.64	9.9
Yangon	Member	Male	Sports and travel	88.63	3	279.1845	03-02-2019	17:36	Ewallet	265.89	4.761904762	13.2945	6
Yangon	Member	Female	Home and lifestyle	52.59	8	441.756	3/22/2019	19:20	Credit card	420.72	4.761904762	21.036	8.5
andalay	Normal	Male	Fashion accessories	33.52	1	35.196	02-08-2019	15:31	Cash	33.52	4.761904762	1.676	6.7
Yangon	Normal	Female	Fashion accessories	87.67	2	184.107	03-10-2019	12:17	Credit card	175.34	4.761904762	8.767	7.7
andalay	Normal	Female	Food and beverages	88.36	5	463.89	1/25/2019	19:48	Cash	441.8	4.761904762	22.09	9.6
Yangon	Normal	Male	Health and beauty	24.89	9	235.2105	3/15/2019	15:36	Cash	224.01	4.761904762	11.2005	7.4

➤ Integration of MySQL with Tableau

Tableau - Book1

File Data Server Window Help

Connections: Add
 localhost MySQL

Database: supermarket

Table: supermarket_sales

supermarket_sales

Need more data?
 Drag tables here to relate them. Learn more

supermarket_sales 16 fields 1000 rows

Name	supermarket_sales
Invoice ID	750-67-8428
Branch	A
City	Yangon
Customer type	Member
Gender	Female
Product line	Health and beauty
Unit price	74.6
Invoice ID	226-31-3081
Branch	C
City	Naypyitaw
Customer type	Normal
Gender	Female
Product line	Electronic accessories
Unit price	15.2
Invoice ID	631-41-3108
Branch	A
City	Yangon
Customer type	Normal
Gender	Male
Product line	Home and lifestyle
Unit price	46.2
Invoice ID	123-19-1176
Branch	A
City	Yangon
Customer type	Member
Gender	Male
Product line	Health and beauty
Unit price	58.2
Invoice ID	373-73-7910
Branch	A
City	Yangon
Customer type	Normal
Gender	Male
Product line	Sports and travel
Unit price	86.2
Invoice ID	699-14-3026
Branch	C
City	Naypyitaw
Customer type	Normal
Gender	Male
Product line	Electronic accessories
Unit price	85.2

Data Source Sheet1

Tableau - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Columns: Rows:

Sheet1

Drop field here

Drop field here

Drop field here

Data Source Sheet1

Search: P | |

Tables:

- Branch
- City
- Customer type
- Date
- Gender
- Invoice ID
- Payment
- Product line
- Revenue
- Time
- Measure Names
- Cogs
- Gross Margin Percentage
- Quantity
- Rating
- Total
- Unit price
- Latitude (generated)
- Longitude (generated)
- supermarket_sales (Count)
- Measure Values

Filters:

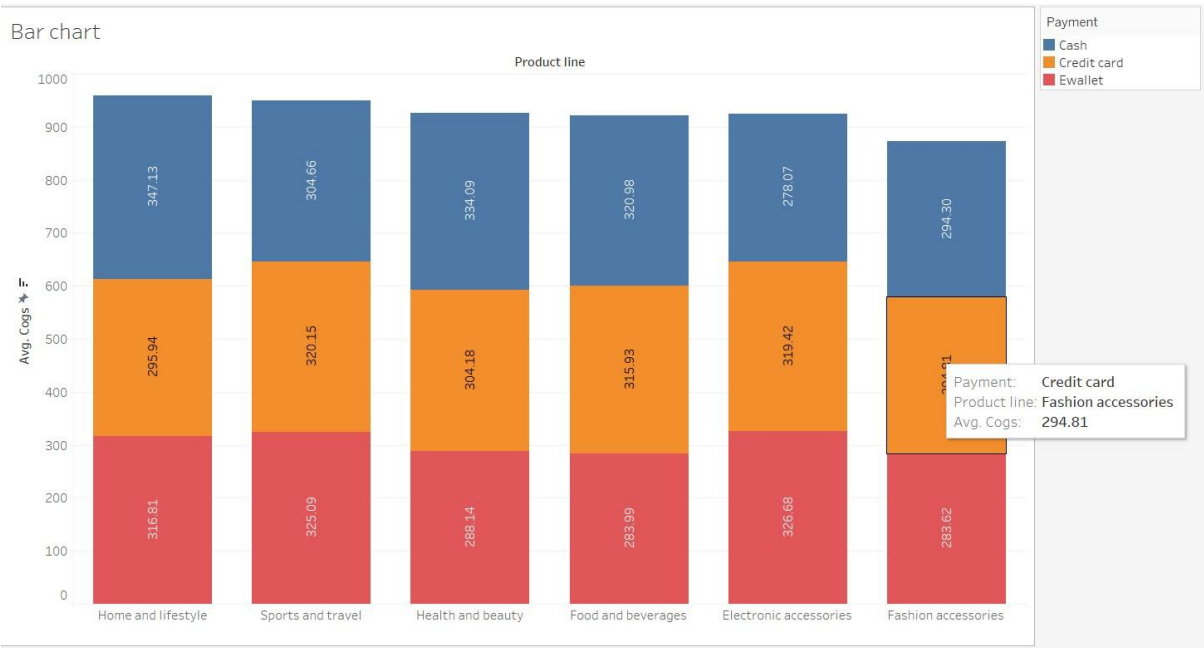
Marks:

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

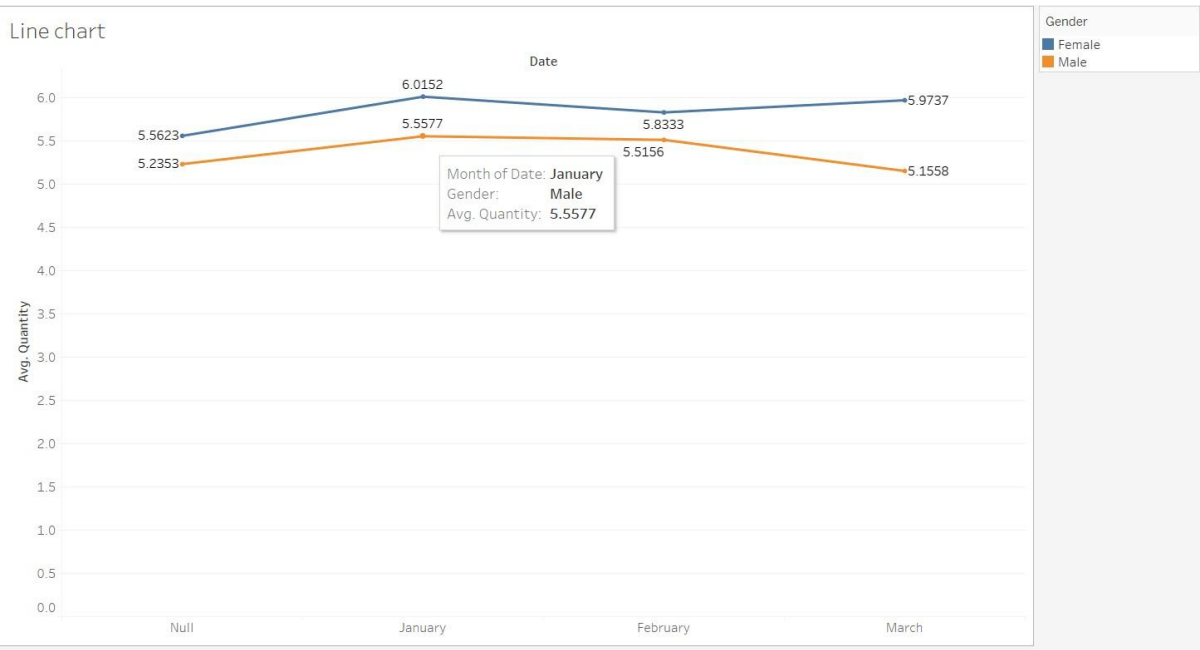
ENG W 13:09 13-09-2023

➤ **Visualizations of the dataset**

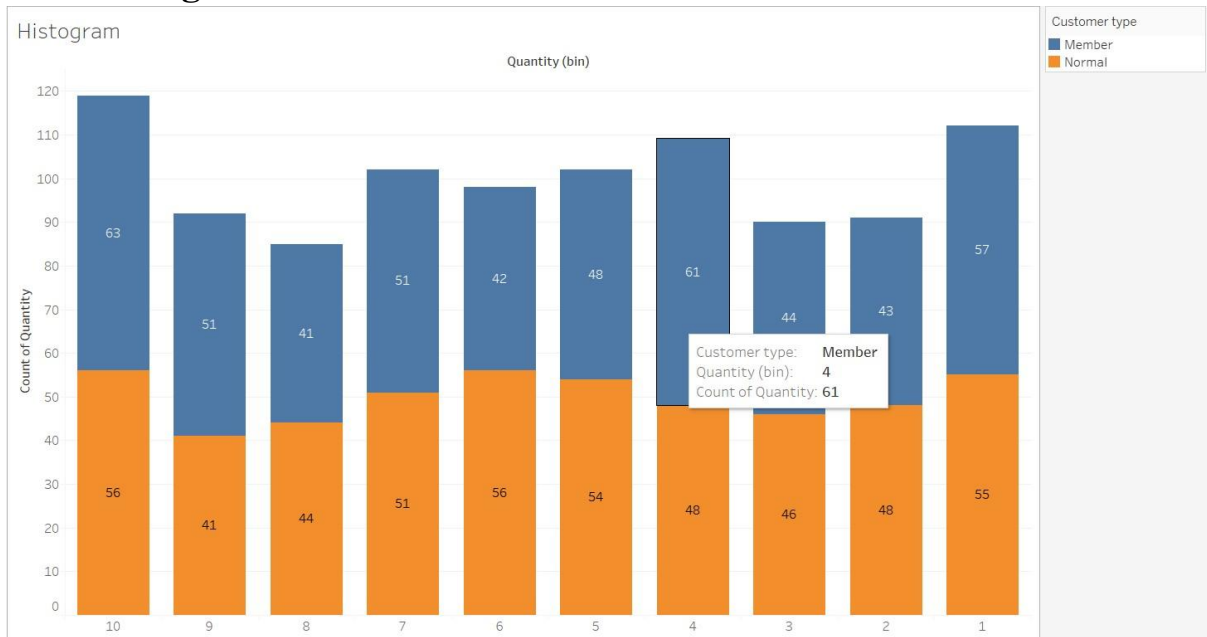
1. Bar chart



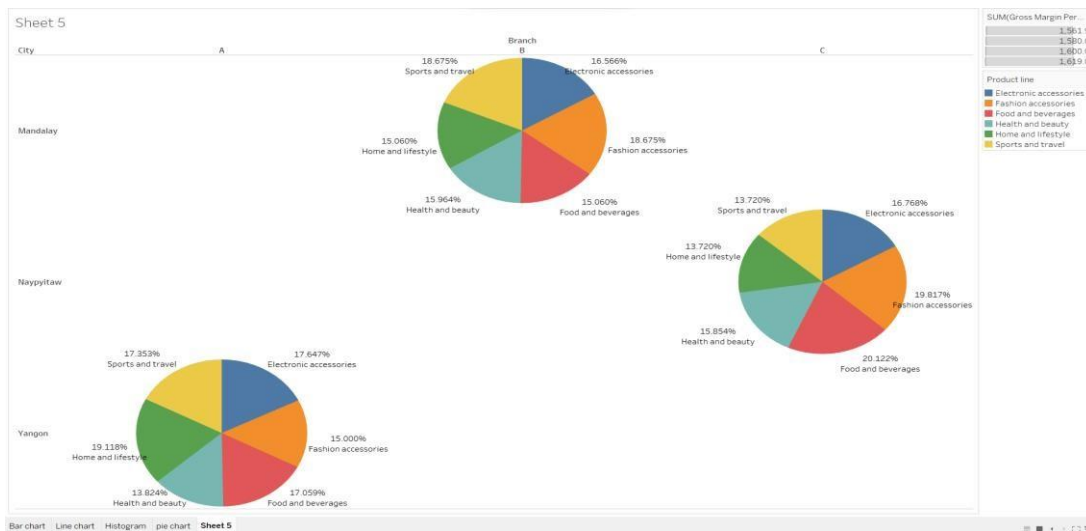
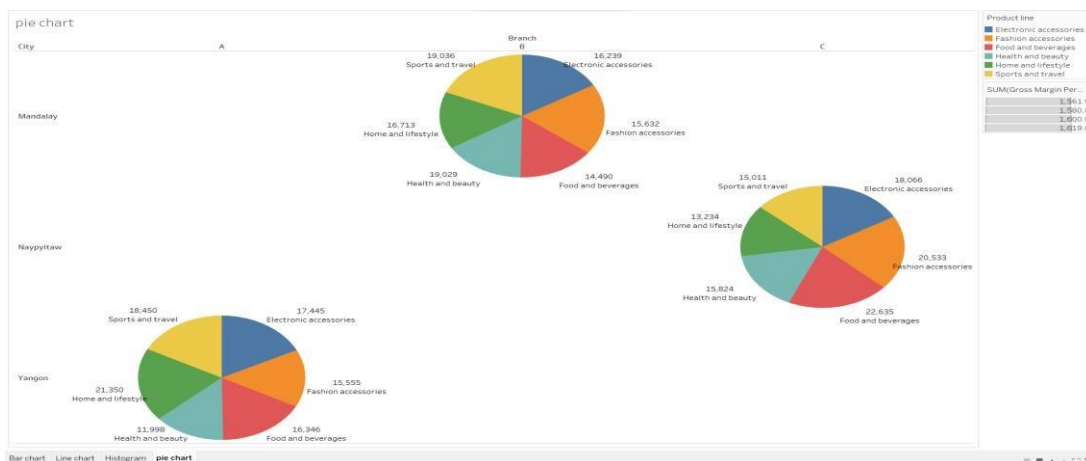
2. Line chart



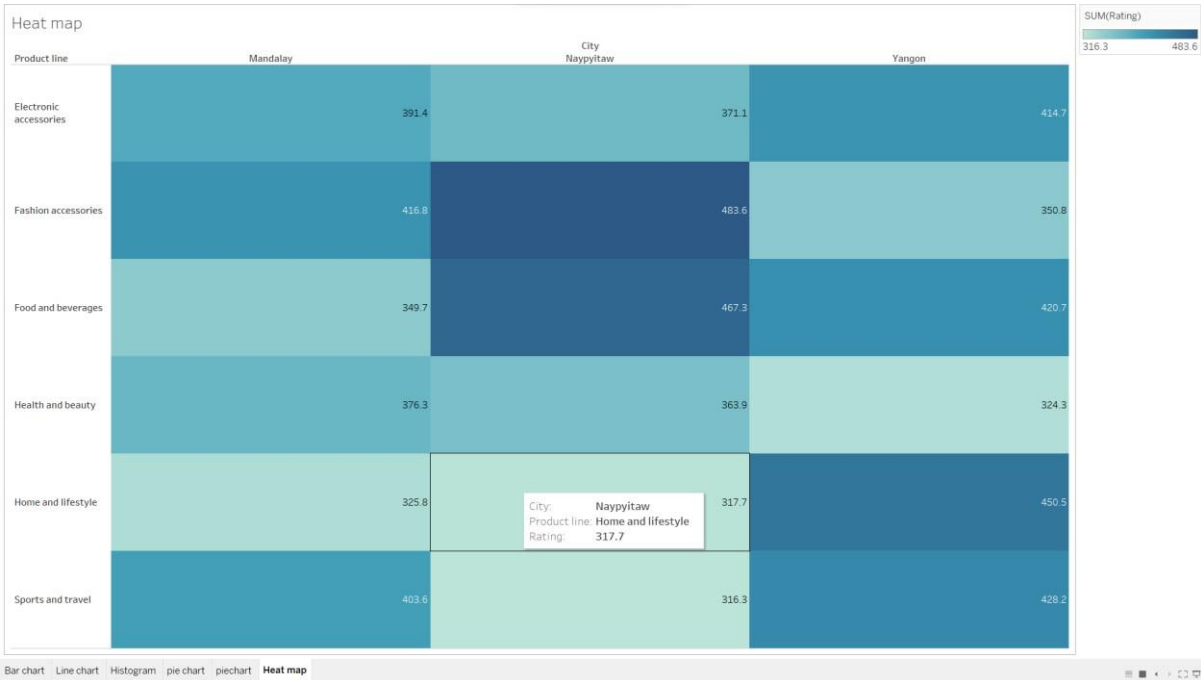
3. Histogram



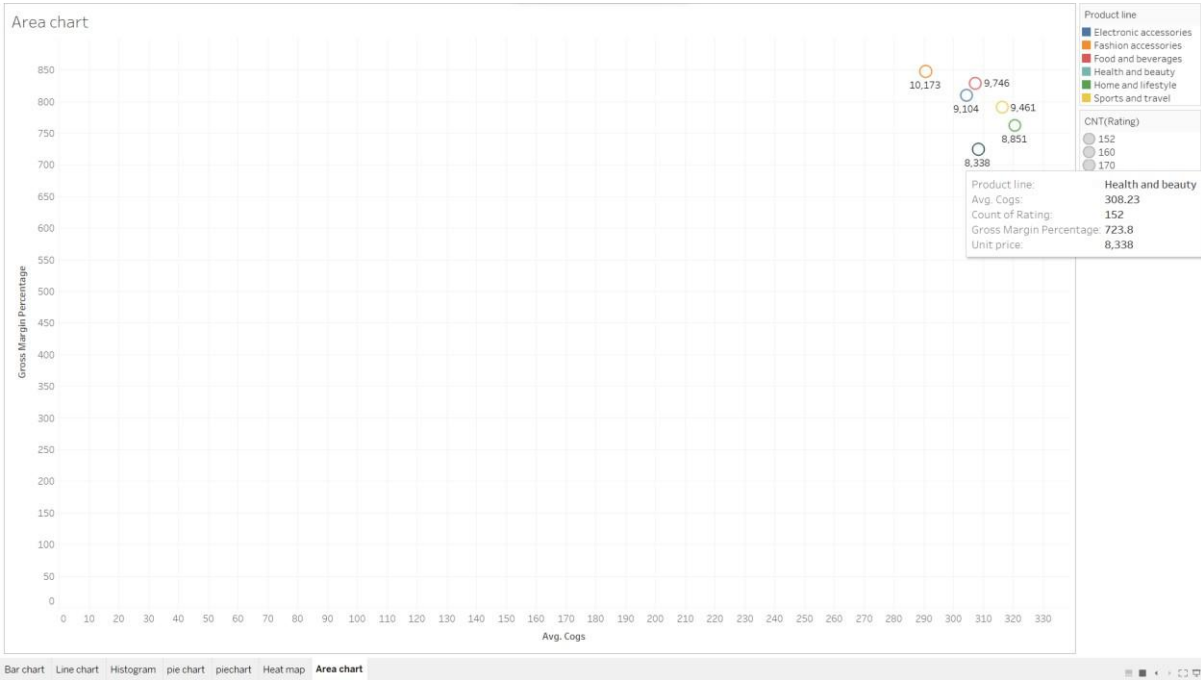
4. Pie chart



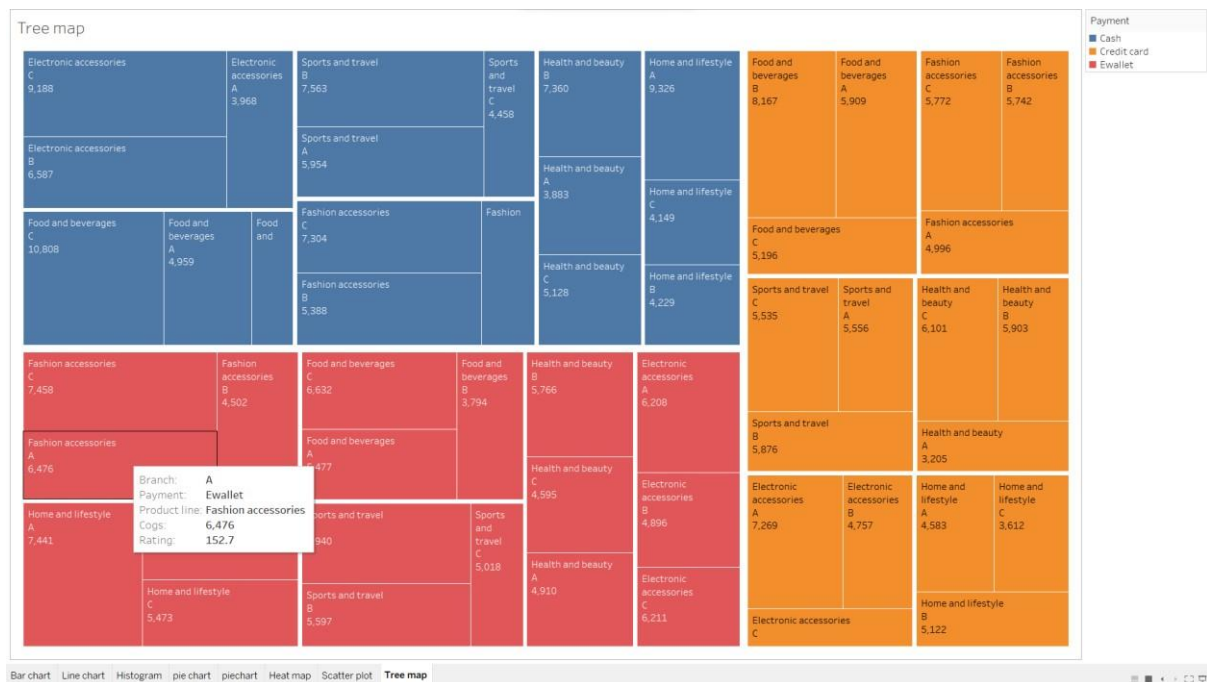
5. Heat map



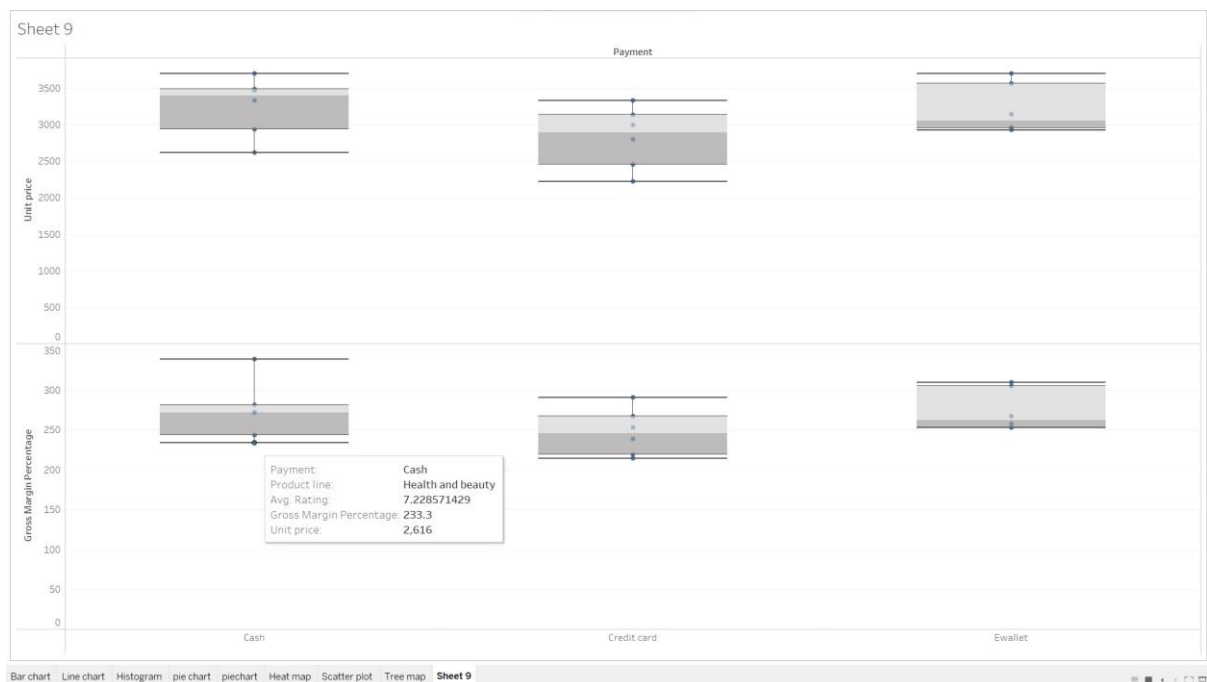
6. Scatter plot



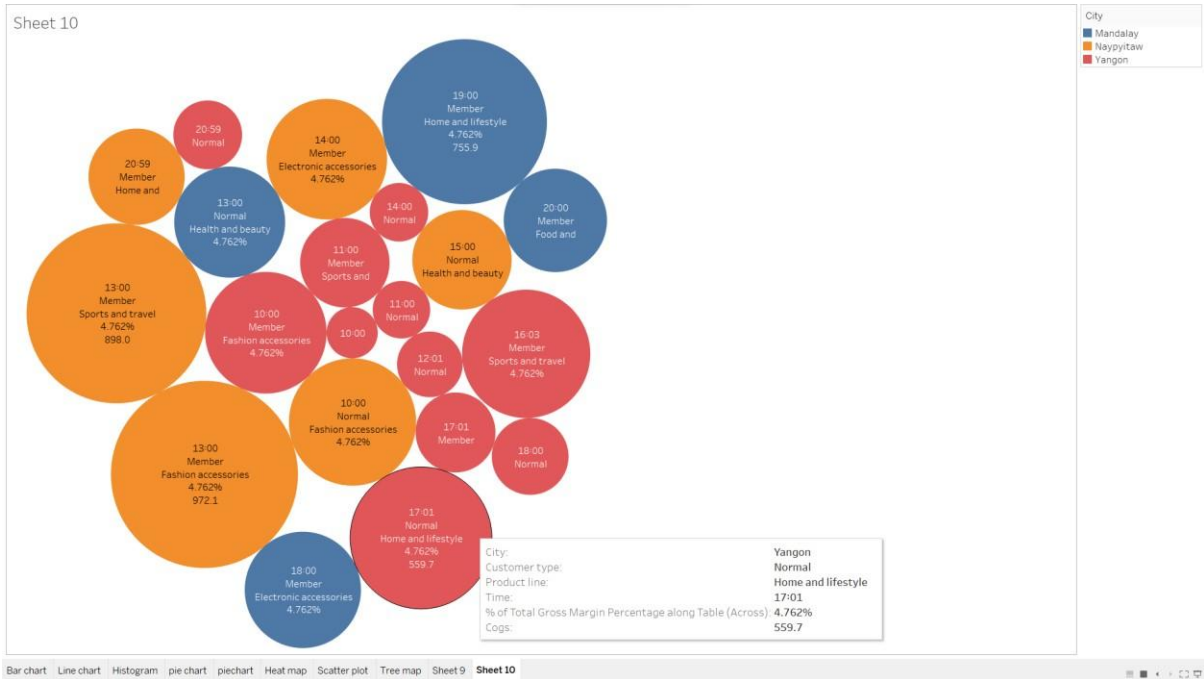
7. Tree map



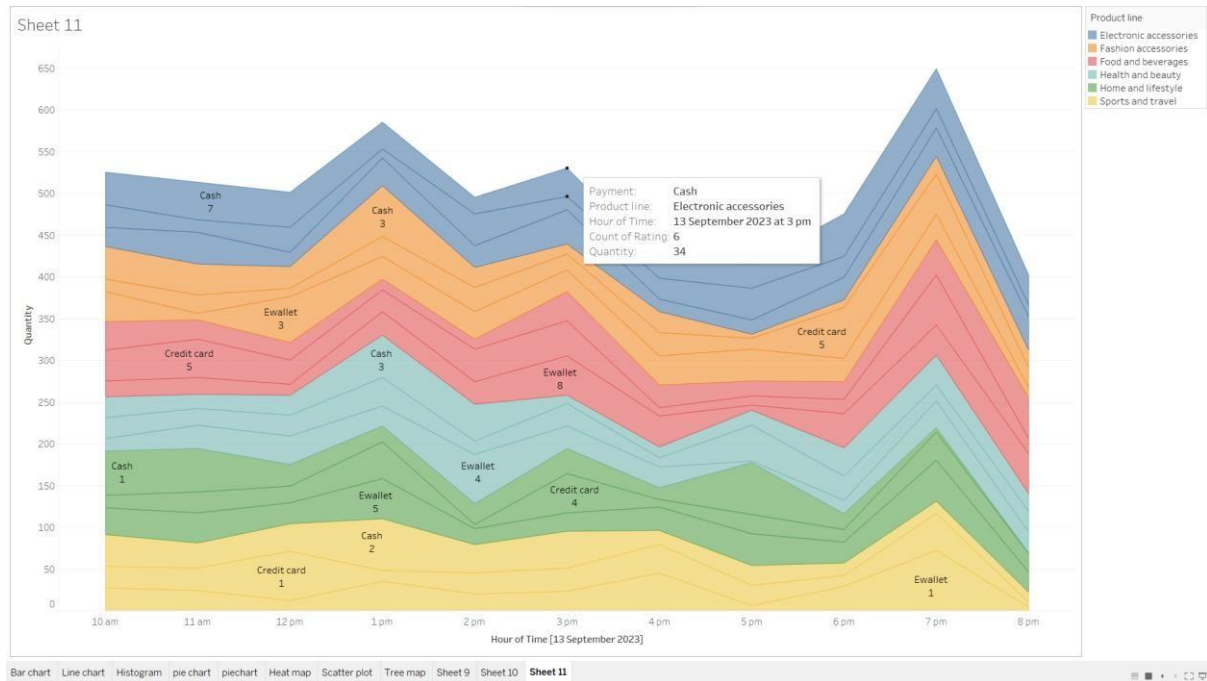
8. Box and whisker plots



9. Bubble chart



10. Area chart



11. Stacked Bar chart

