

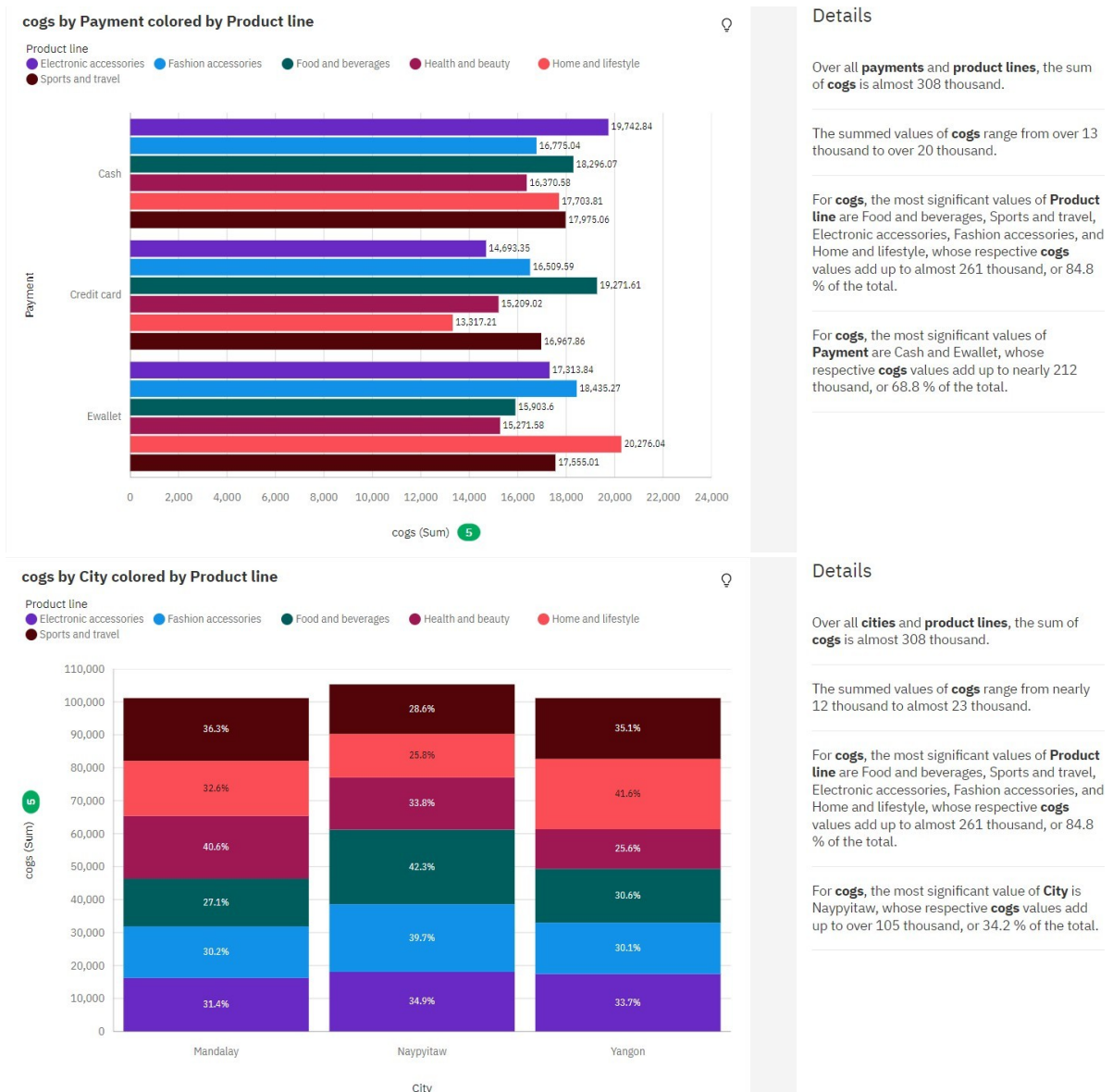
## DA Assignment-1

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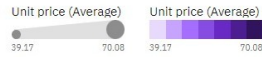
Reg.No: 21BCE8360

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.

### Visualization:



## Unit price by Day, City and Unit price 4



## Details

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

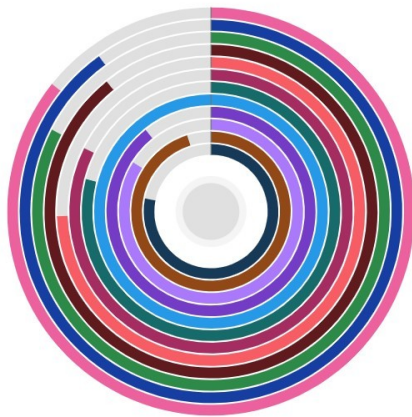
Over all **days** and **cities**, the average of **Unit price** is 55.67.

The average values of **Unit price** range from 39.17 to 70.08.

15 is the most frequently occurring category of **Day** with a count of 44 items with **Unit price** values (4.4 % of the total).

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

## gross income, Product line, Customer type 5



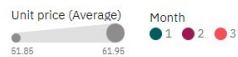
## Details

Across all **product line - customer types**, the sum of **gross income** is over fifteen thousand.

**gross income** ranges from over a thousand, when **Product line - Customer type** is Health and beauty|Normal, to almost 1500, when **Product line - Customer type** is Food and beverages|Member.

For **gross income**, the most significant values of **Product line - Customer type** are Food and beverages|Member and Electronic accessories|Normal, whose respective **gross income** values add up to nearly three thousand, or 18.9 % of the total.

## Product line colored by Month sized by Unit price 4



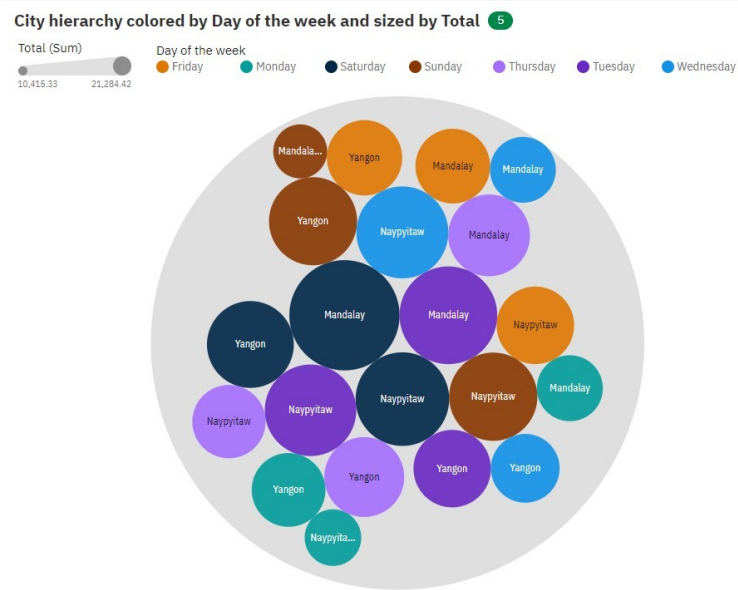
## Details

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

The average values of **Unit price** range from 51.85 to 61.95.

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).

1 (35.2 %) and 3 (34.5 %) are the most frequently occurring categories of **Month** with a combined count of 697 items with **Unit price** values (69.7 % of the total).



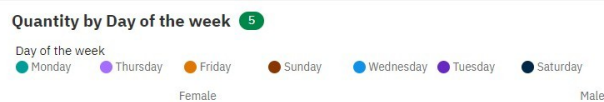
### Details

Over all **cities** and **day of the weeks**, the sum of **Total** is nearly 323 thousand.

The summed values of **Total** range from over 10 thousand to over 21 thousand.

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

For **Total**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **Total** values add up to almost 108 thousand, or 33.3 % of the total.



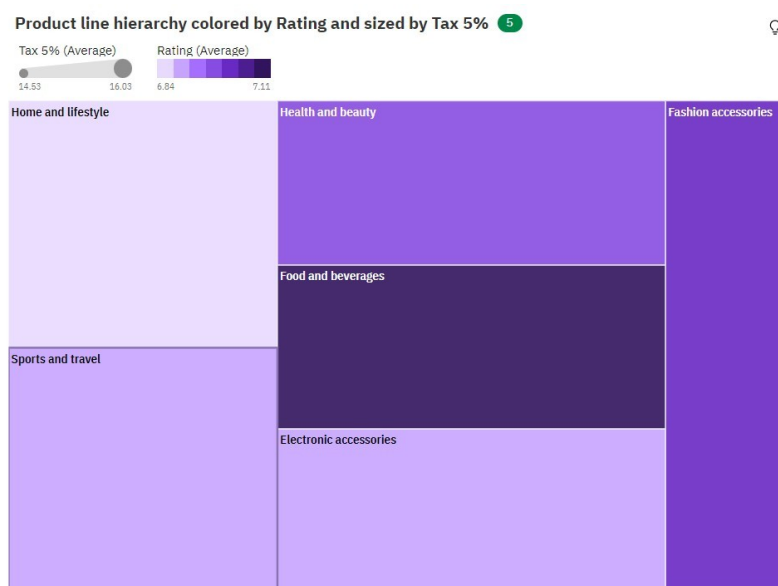
### Details

Across all **day of the weeks** and **genders**, the sum of **Quantity** is over 5500.

The summed values of **Quantity** range from 289 to 499.

For **Quantity**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **Quantity** values add up to nearly two thousand, or 32.3 % of the total.

For **Quantity**, the most significant value of **Gender** is Female, whose respective **Quantity** values add up to nearly three thousand, or 52.1 % of the total.



### Details

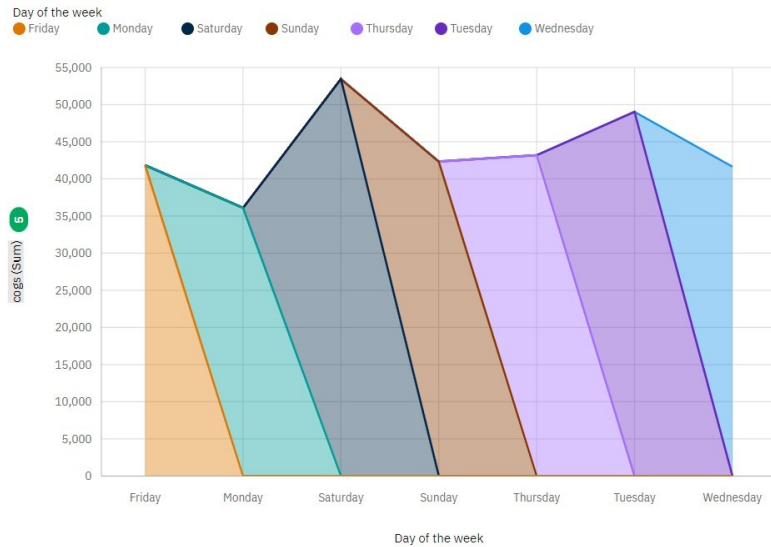
The total number of results for **Rating**, across all **product lines**, is a thousand.

Over all **product lines**, the average of **Tax 5%** is 15.38.

The average values of **Tax 5%** range from 14.53, occurring when **Product line** is Fashion accessories, to 16.03, 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 **Tax 5%** values (84.8 % of the total) .

cogs by Day of the week colored by Day of the week



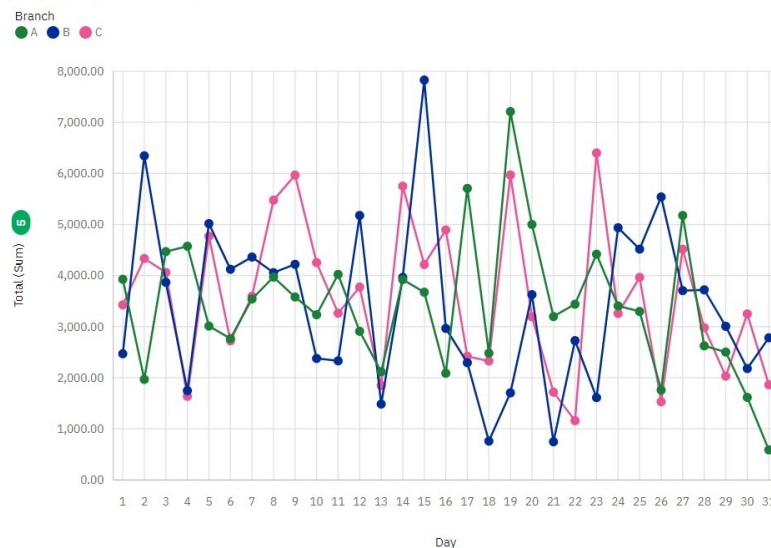
## Details

Over all **day of the weeks** and **day of the weeks**, the sum of **cogs** is almost 308 thousand.

The summed values of **cogs** range from over 36 thousand to over 53 thousand.

For **cogs**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **cogs** values add up to over 102 thousand, or 33.3 % of the total.

Total by Day colored by Branch



## Details

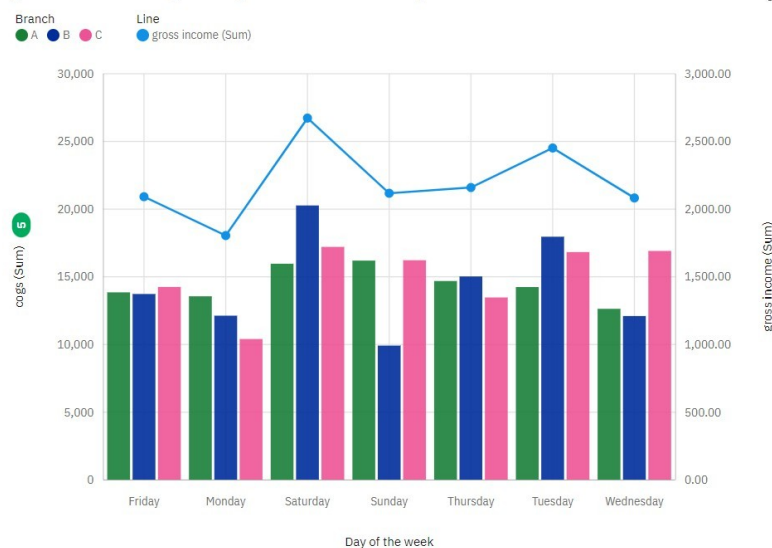
Over all **days** and **branches**, the sum of **Total** is nearly 323 thousand.

The summed values of **Total** range from 588.2 to nearly eight 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 **Day** are 15 and 19, whose respective **Total** values add up to almost 31 thousand, or 9.5 % of the total.

gross income and cogs for Day of the week colored by Branch



## Details

Over all **day of the weeks** and **branches**, the sum of **cogs** is almost 308 thousand.

The summed values of **cogs** range from nearly ten thousand to over twenty thousand.

For **cogs**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **cogs** values add up to over 102 thousand, or 33.3 % of the total.

For **cogs**, the most significant value of **Branch** is C, whose respective **cogs** values add up to over 105 thousand, or 34.2 % of the total.

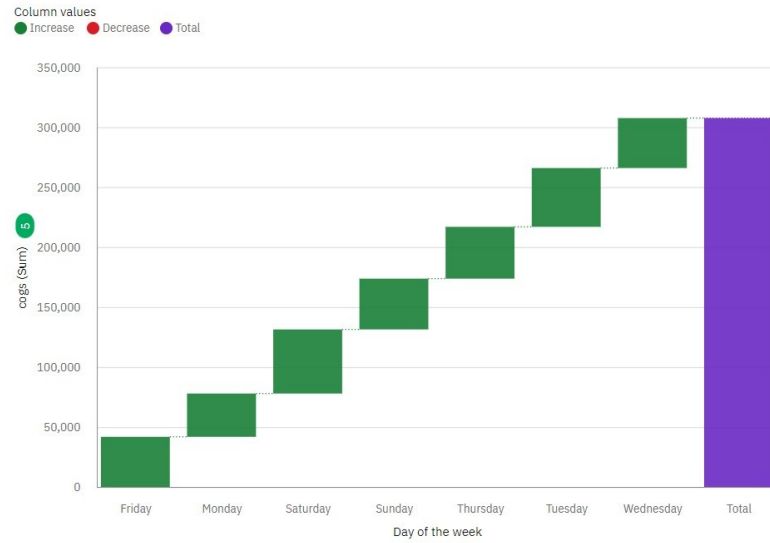
Across all **day of the weeks**, the sum of **gross income** is over fifteen thousand.

**gross income** ranges from nearly two thousand, when **Day of the week** is Monday, to over 2500, when **Day of the week** is Saturday.

For **gross income**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **gross income** values add up to over four thousand, or 22.2 % of the total.



### cogs for Day of the week



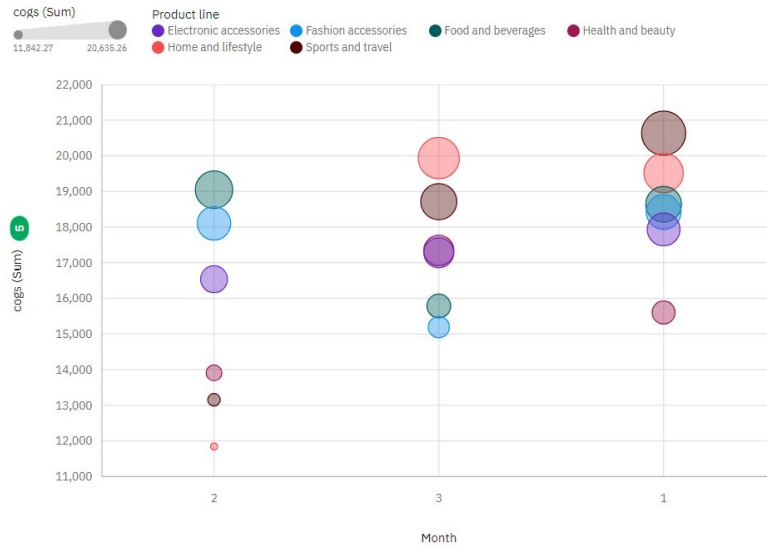
#### Details

Over all **day of the weeks**, the sum of **cogs** is almost 308 thousand.

**cogs** ranges from over 36 thousand, when **Day of the week** is Monday, to over 53 thousand, when **Day of the week** is Saturday.

For **cogs**, the most significant values of **Day of the week** are Saturday and Tuesday, whose respective **cogs** values add up to over 102 thousand, or 33.3 % of the total.

### Month by cogs colored by Product line and sized by cogs



#### Details

Over all **months** and **product lines**, the sum of **cogs** is almost 308 thousand.

The summed values of **cogs** range from nearly 12 thousand to almost 21 thousand.

For **cogs**, the most significant values of **Month** are 1 and 3, whose respective **cogs** values add up to almost 215 thousand, or 69.9 % of the total.

For **cogs**, the most significant values of **Product line** are Food and beverages, Sports and travel, Electronic accessories, Fashion accessories, and Home and lifestyle, whose respective **cogs** values add up to almost 261 thousand, or 84.8 % of the total.

### Quantity for Customer type and Product line

Quantity	Member	Normal	Summary
Electronic acces...	429 ↑	542 ↑	971
Fashion accessor...	439 ↑	463 ↑	902
Food and bevera...	506 ↑	446 ↑	952
Health and beauty	428 ↑	426 ↑	854
Home and lifestyle	490 ↑	421 ↑	911
Sports and travel	493 ↑	427 ↑	920
Summary	2,785	2,725	5,510

#### Details

Across all **customer types** and **product lines**, the sum of **Quantity** is over 5500.

The summed values of **Quantity** range from 421 to 542.

For **Quantity**, the most significant value of **Customer type** is Member, whose respective **Quantity** values add up to nearly three thousand, or 50.5 % of the total.

For **Quantity**, the most significant values of **Product line** are Electronic accessories and Food and beverages, whose respective **Quantity** values add up to nearly two thousand, or 34.9 % of the total.