Title: EDA of a company to analyse it's expansion plans across three cities in Myanmar

Name: Soumyabrata Ghosh

Abstract: Our main aim of the study was to analyse the certain trends of demand and profit of a supermarket chain by analyzing their sales data of different products across different brands. Their branches were located in three different locations. So we will be analyzing some trends regarding the sales data of different items and payment means.

But our ulterior motive is to point through measuring these small efforts where to expand among the three cities and which kind of items to be chosen for this expansion purpose

Question 1: Which city among the three cities to be chosen for expansion for which particular items?

Question 2: Which is the busiest branch?

Question 3: What are the best methods of payment means whether they prefer cash or digital payment?

Question 4: What are the ratings associated with individual branches

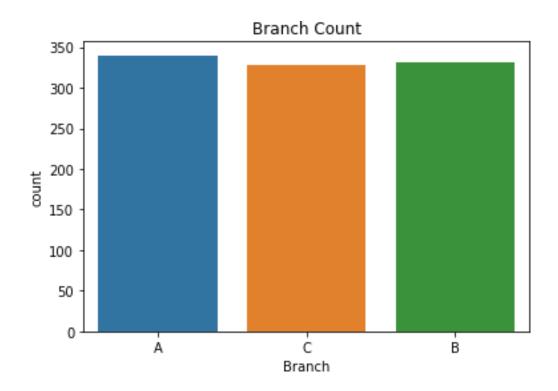
Question 5: What is the distribution of sales quantity per hour in a monthly fashion keeping in mind the gender?

Question 6: What is the distribution of sales quantity per hour in a monthly fashion keeping in mind the customer type?

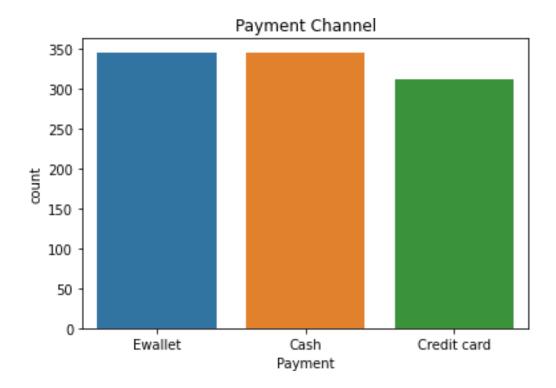
Question 7: What is the distribution of each branch's sales quantity per hour in a monthly fashion?

Question 8: What is the detailed product analysis and customer preferences?

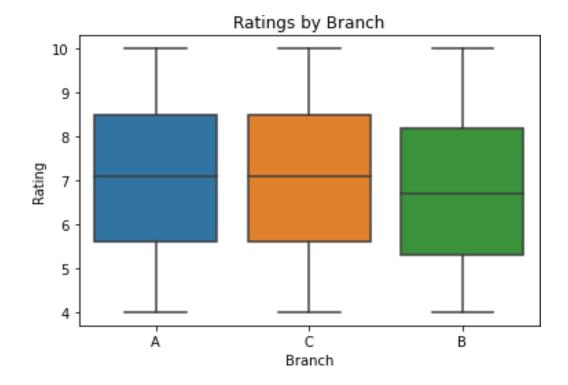
A is the most busy branch.



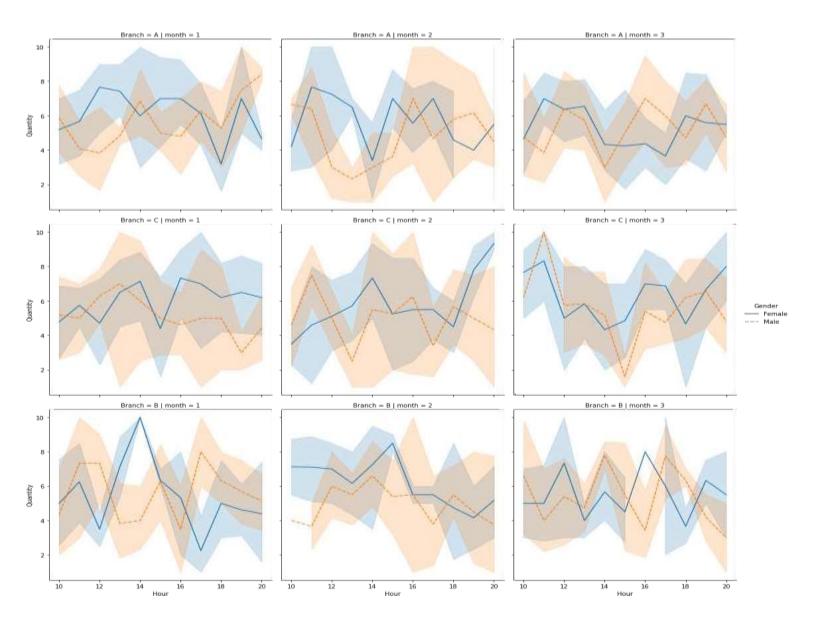
Most of the customers pay through the E-wallet and Cash Payment.



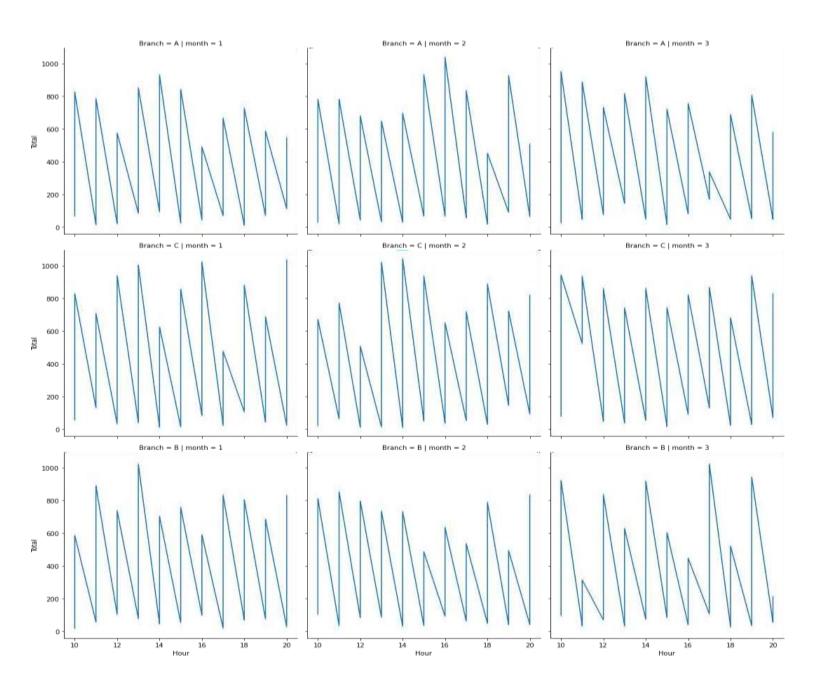
Ratings by Branch



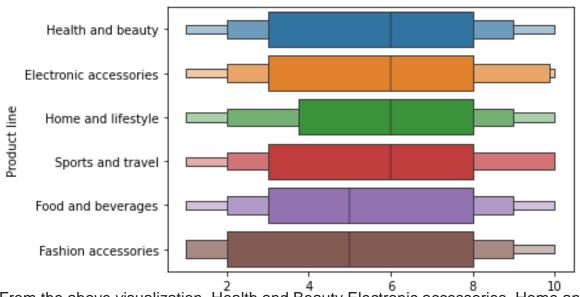
Distribution of branch's sales quantity per hour in a monthly fashion in function Gender type (Female/male)



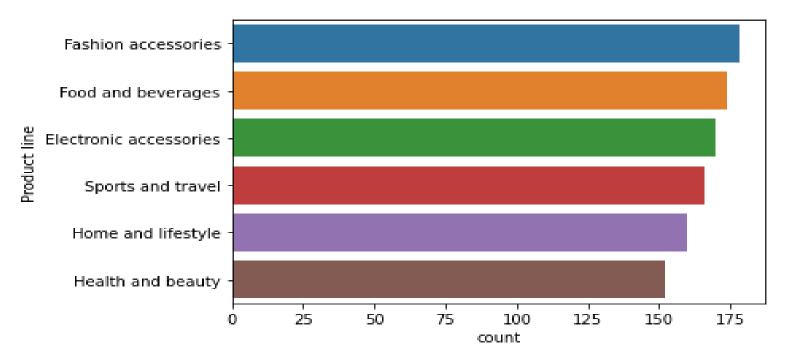
Distribution of each branch's sales quantity by the hour in a monthly fashion



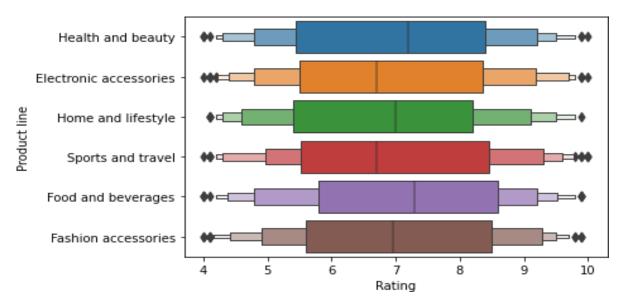
Product Analysis



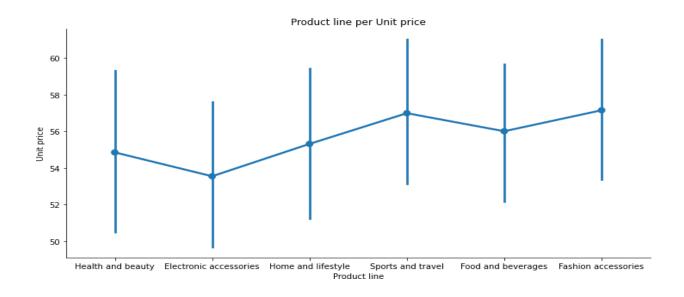
From the above visualization, Health and Beauty Electronic accessories, Home and lifestyle, Sports and travel have a better average quantity sales that food and beverages as well as Fashion accessories.

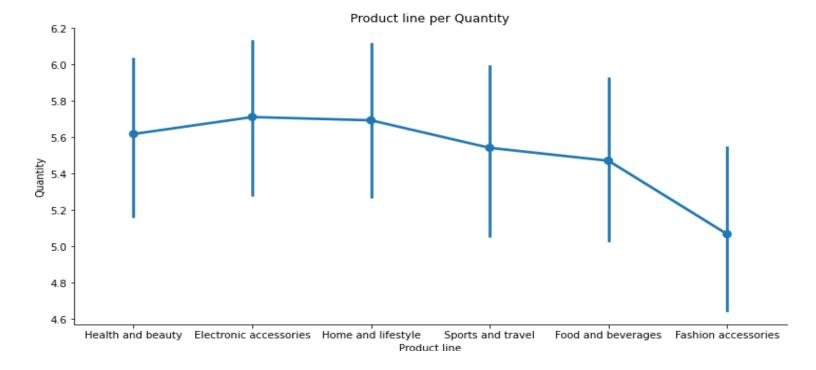


From the above image shows the top product line item type sold in the given dataset: Fashion Accessories is the highest. Health and beauty is the lowest.

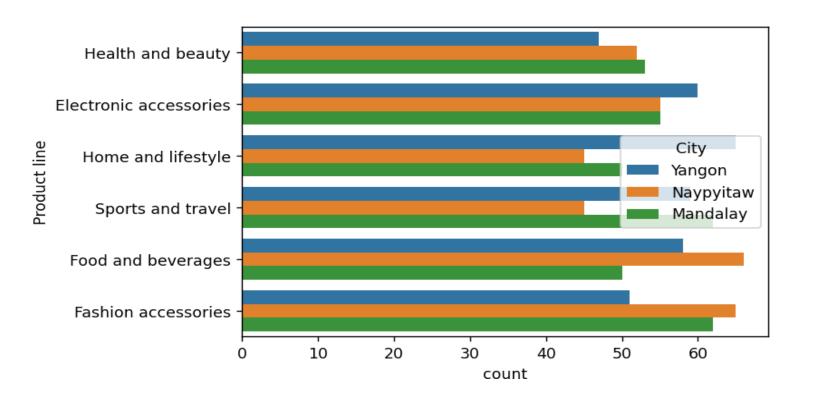


Food and Beverages have the highest average rating while sports and travel the lowest





Electronic accessories has the low Unit price, on the other hand it has the high quantity of products purchased by customer => Customers want to buy the cheap products like Electronic accessories Health & Beauty and Home & Lifestyle.



Naypyitaw is a good place to sell Fashion accessories and Food & Beverages.

Yangon is a good place to sell Electronic accessories.

FINAL COMPLETE BUSINESS REPORT

- 1. The city chosen for expansion should be Naypyitaw.
- 2. Open the store in Naypyitaw with a full-backed inventory of goods in product categories Food and Beverages, Fashion Accessories and Electronics.
- 3. The company should improve service in Electronics domain.
- 4. Increase service in cash payment modes.