

The Customer's Market

The Customer's Market serves three major cities of Myanmar: *Yangon, Mandalay, and Nay Pyi Taw (capital city)*, through its retail chain. The retail store is operated on a self-service basis and deals in the following product lines:

1. Health and Beauty
2. Electronics and Accessories
3. Home and Lifestyle
4. Sports and Travel
5. Food and Beverages
6. Fashion and Accessories

Name of Cities	Population
Yangon	44,77,638
Mandalay	12,08,099
Nay Pyi Taw	9,25,000
Mawlamyine	4,38,861
Kyain Seikgyi Township	2,46,065
Bago	2,44,376
Patheingyi	2,37,089
Monywa	1,82,011
Sittwe	1,77,743
Meiktila	1,77,442
Myeik	1,73,298
Taunggyi	1,60,115

Table 1: Population of Cities in Myanmar

As the head manager of the company, I am interested in certain metrics to help shape the future of the store in the years to come. Having conversed with all three branch managers, below are the various objectives we had drawn out as the chief objectives to be worked up on.

Objectives of Analyzing Data:

1. Finding the peak times in the day for sales.
2. Gross-income through Member customers vs Regular customers.
3. Which 3 cities should we target if we were to expand our services to other cities?
4. Which Product Line or Lines (max. 2) performs better over the others. Is it consistent across cities and months?
5. Does rating of customers depend upon the time they shop? Is it that peak times leads to bad ratings?
6. Is Pareto Analysis applicable on the Product Line and the gross income they generate?
7. Given 3 Unique Branches and 6 Product Lines, which of these 18 combos makes for the minimum Gross Income?
8. Does customer retention (Member Customers) lead to higher Sales? Further, we may use this to determine the optimal membership costs.
9. Of Member-Male; Member-Female; Regular-Male; and Regular-Female, which customer base is most likely to use cash? Is this consistent across cities?
10. Does unit price of product affect the customer buying behavior? What would be the optimal price, which would maximize the metric $\text{Total} = (\text{Unit Price}) * (\text{Quantity})$?
11. What is the share of gross income made through different modes of payment?
12. What should be the percentage increase in unit price, if we wish to give 10% discount to the customer and still make the same gross income as before?
13. If we would like to increase the gross margin percentage to 5.7% for Regular Customers:
 - a. Up to what percentage discount can we advertise for Member Customers?
 - b. As COGS has to be constant, by what percentage would unit price increase?