RelianceHealth
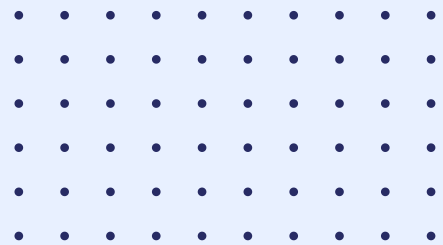
DATA ANALYST ASSIGNMENT

BABALOLA DAMILOLA

INTRODUCTION

This presentation outlines the approach used to carry out an analysis of Reliance Health Insurance's data to be able to discover insights to answer business questions.

Tools used: MSSQL, Excel and Tableau Public

BUSINESS TASK

1. Do you think this company is profitable? Why? What is the Medical Loss Ratio? The medical loss ratio is the cost of claims paid divided by the total revenue from premiums
2. Which segment of the population is the most (least) profitable (e.g. age, gender)? Feel free to group the age any way you want.
3. Which plan is the most profitable?
4. Is there any correlation between plan selection and segment of the population (i.e. do certain groups have a higher affinity to a given plan). For example: old women prefer gold plans.
5. Please provide any other insights you discover in the data.

DATA PREPARATION

- Downloaded dataset
- Converted datasets from CSV to Excel workbook
- Imported Tables to MSSQL
- Each table was viewed to view its columns and data
- Each column on all tables was assigned to suitable data types

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DATA CLEANING

- Checked for blanks.
- Removed blanks.
- Checked for duplicates
- Removed duplicates

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Question 1: Find out if Reliance Health is profitable and Why? What is the Medical Loss Ratio?
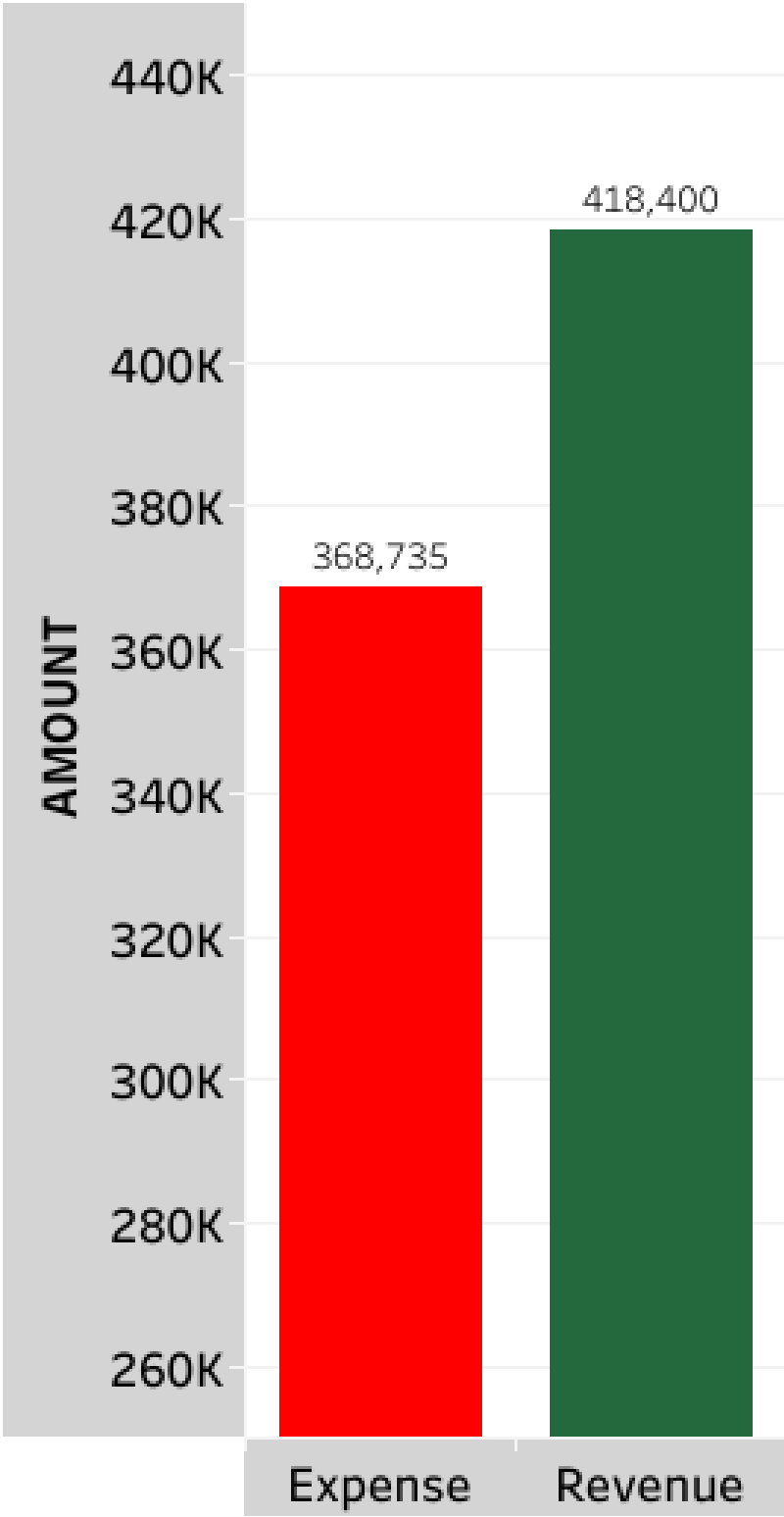
- Reliance health is profitable because the cost of claimed plans is lesser than the selling price of the various plans.

- The Medical loss ratio is **0.8813**

Find the graphical representation below

Medical Loss Ratio

Expense	Revenue	Medical Loss Ratio
368,735	418,400	0.8813

Revenue and Expenses

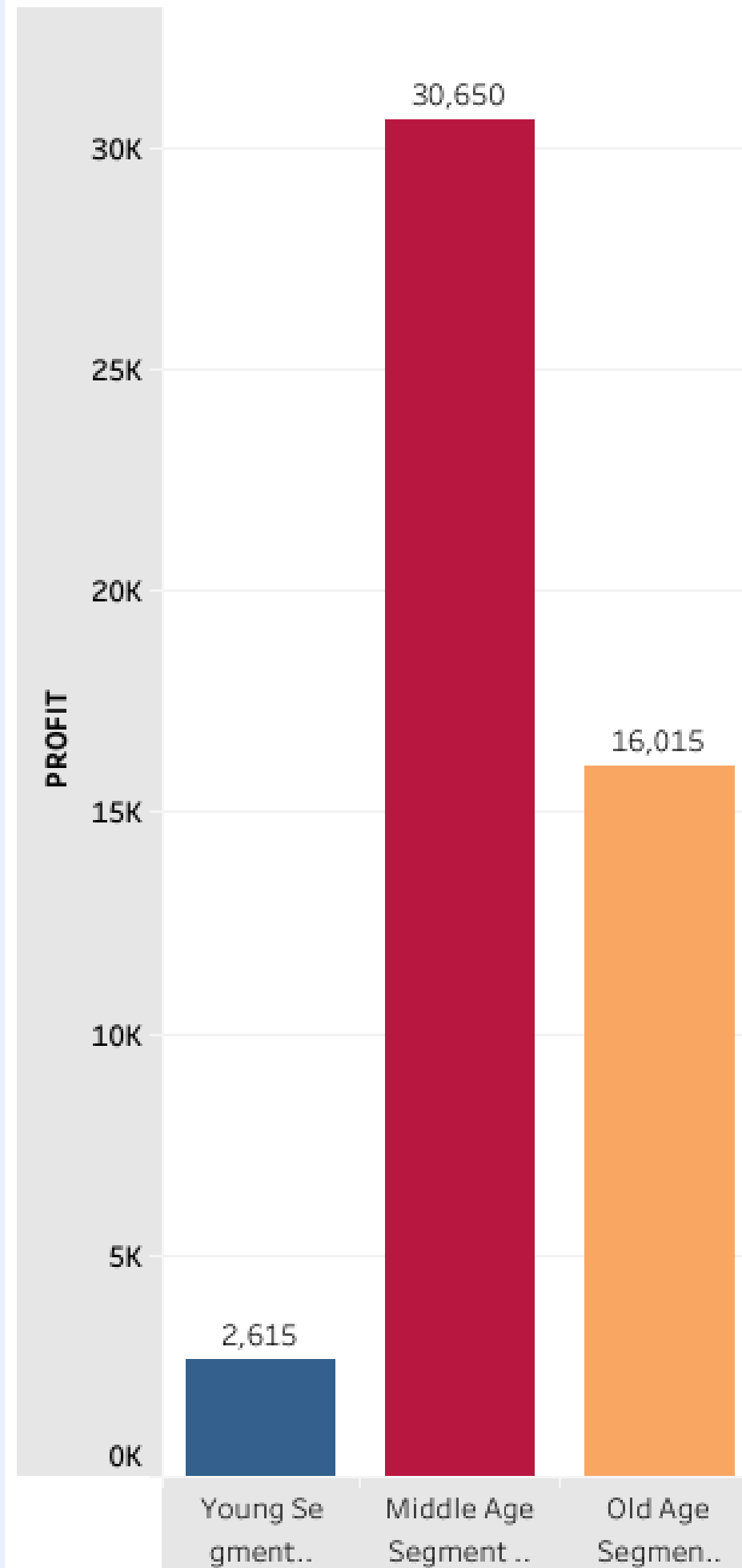## Question 2: Which segment of the population is the most (least) profitable?

- The minimum age is 18 years old and the maximum age is 92 years old,
- The Middle Age Segment most profitable segment.
- The Young Age Segment is the least Profitable

N.B; Age Segment consists of Young Age Segment(Ages from 30 and below), Middle Age Segment(Ages from 31 to 60), Old Age Segment(Ages from 61 and above)
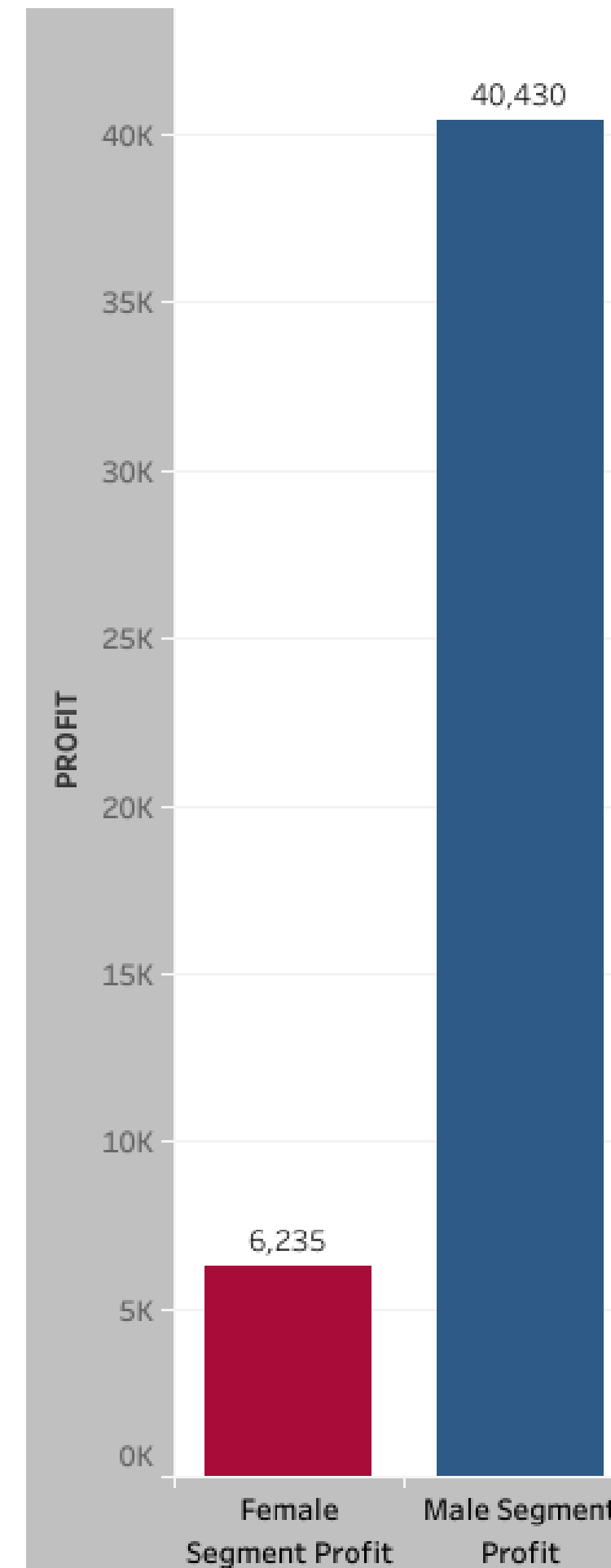
- The Male Segment is the most profitable segment.
- The Female Segment is the least profitable.
- The Medical loss ratio is **0.8813**

Find the graphical representation below

Age Segment Profit

Segment	Profit
Young Segment..	2,615
Middle Age Segment ..	30,650
Old Age Segmen..	16,015

Gender Segment Profit

Segment	Profit
Female Segment Profit	6,235
Male Segment Profit	40,430

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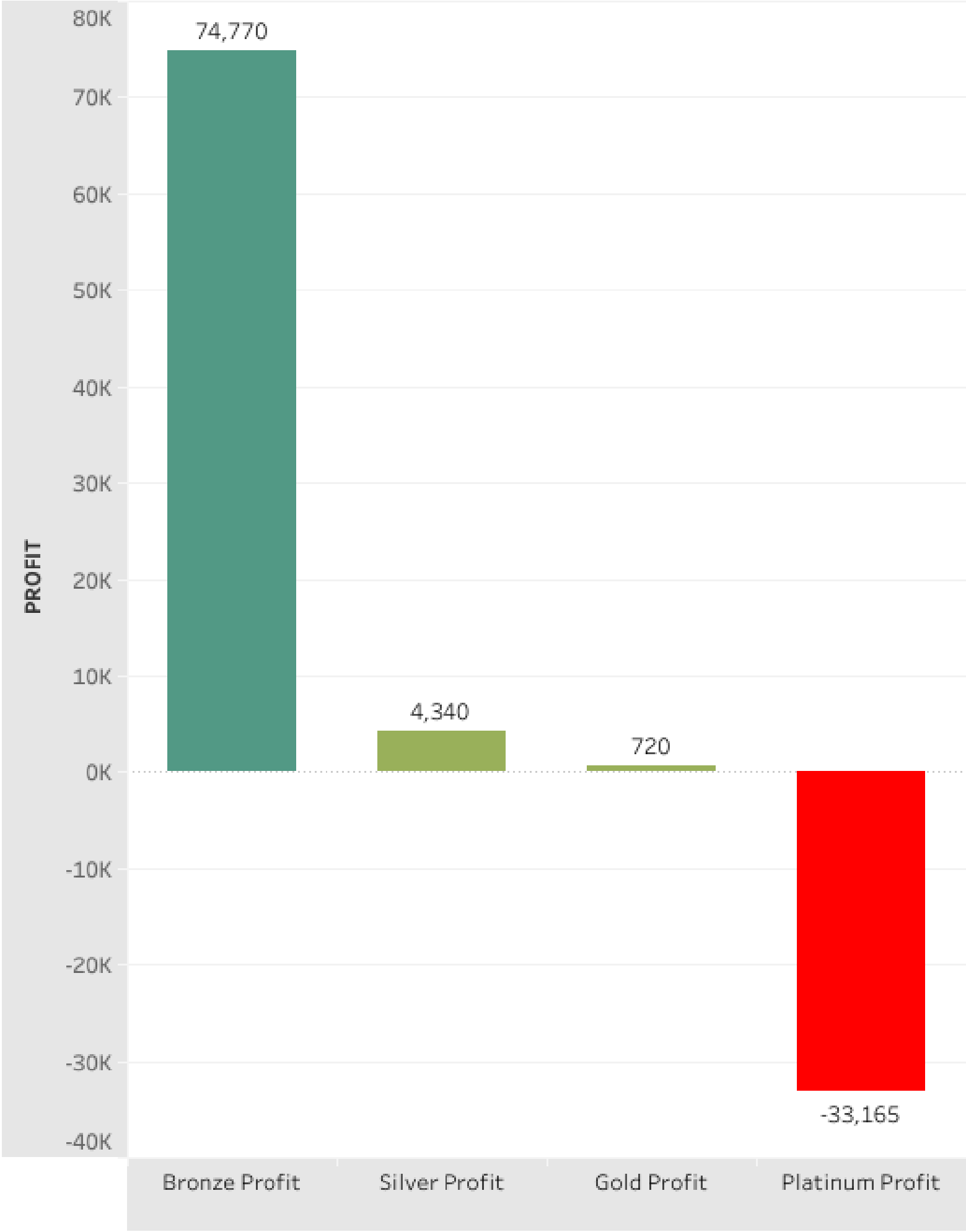
Question 3: Which plan is the most profitable?

- The most profitable plan is the Bronze Plan
- The least Profitable plan is the Platinum Plan

**Find the graphical representation below**

Plan Profit

	PROFIT
Bronze Profit	74,770
Silver Profit	4,340
Gold Profit	720
Platinum Profit	-33,165

DATA ANALYSIS/EXPLORATION

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Questions 4& 5: Is there any correlation between plan selection and the segment of the population?

- Young aged Males prefer Bronze Plans
- Young aged Females prefer Bronze Plans
- Middle-aged Males prefer Bronze Plans.
- Middle-aged Females prefer Bronze Plans.
- Old aged Males prefer Bronze Plans
- Old aged Females prefer Bronze Plans
- The Middle age Male Segment has the highest number of enrollees
- The Bronze Plan has the highest number of Enrollees
- The Platinum Plan has the least number of Enrolees.

Find the graphical representation below

PLAN NAME/GENDER/AGE GROUP

N.B :
- Red indicates Young Age group]
- Blue indicates Middle Age Group
- Orange Indicates Old age group

RECOMMENDATIONS

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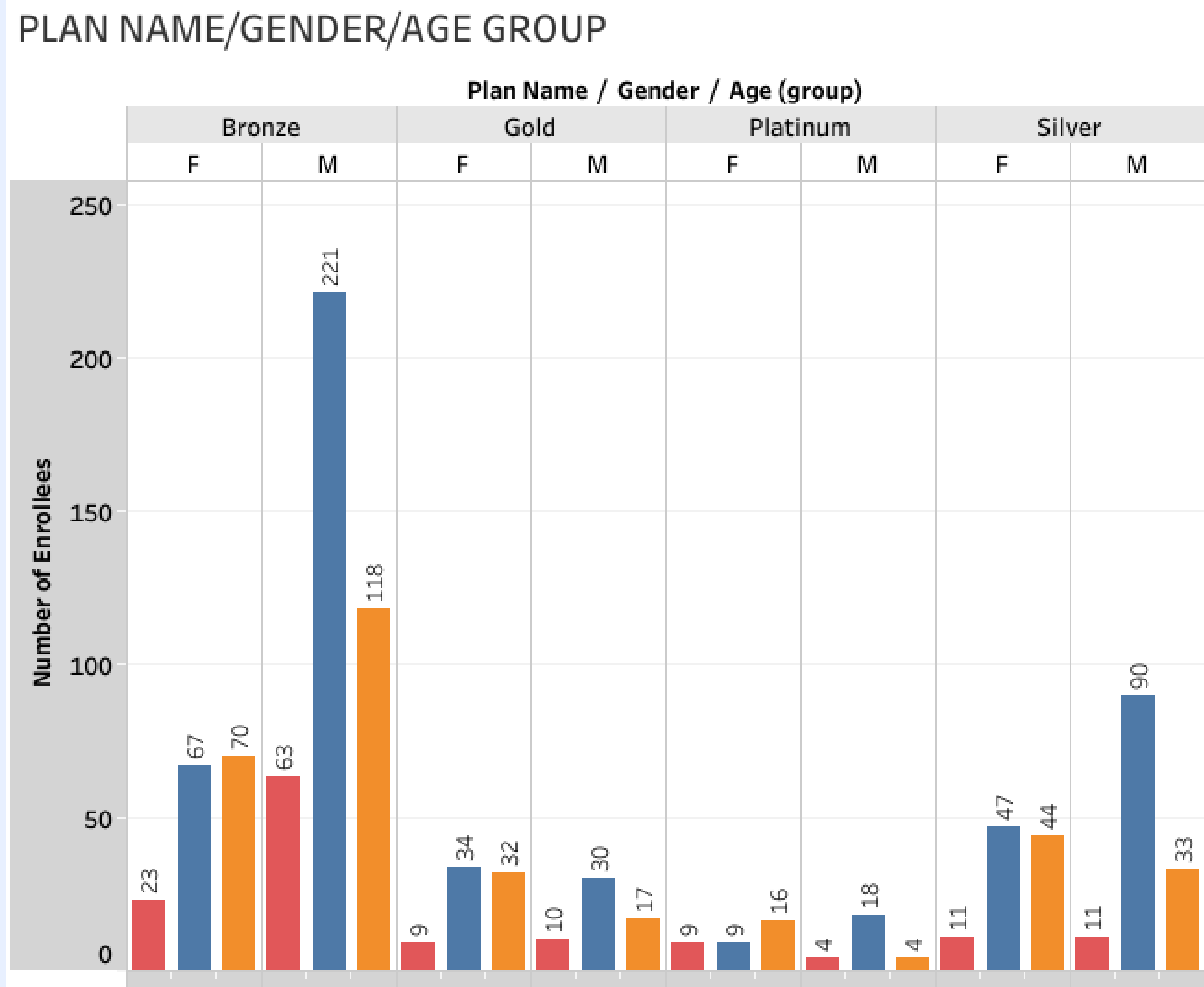
- End Platinum Plans because it is not profitable
- Allocate more resources and marketing to The Bronze Plan because it is the most profitable.
- Target Middle Aged Groups because they are the most enrolled and generate the most profit, also target Old age too.
- Target the Male segment because they generate the most profit.

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THANK YOU