

# Cardio Good Fitness Portfolio

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# Our Aim & Expectations

## AIM

Assist the market team in identifying what type of audience to target for 3 different products: TM195, TM498 and TM798.

## Hypothesis

We expect a strong positive correlation between age, fitness and income. We anticipate older customers who have higher fitness level and income would purchase the most expensive product (TM798).

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	Income	Fitness	Age	Gender
Income	1.000000	0.535005	0.513414	-0.202053
Fitness	0.535005	1.000000	0.061105	-0.254609
Age	0.513414	0.061105	1.000000	-0.027544
Gender	-0.202053	-0.254609	-0.027544	1.000000

# Product Details

## TM195

	Age	Gender	MaritalStatus	Usage	Fitness	Income	Miles
count	80.000000	80.000000	80.000000	80.000000	80.000000	80.000000	80.000000
mean	28.550000	0.500000	0.600000	3.087500	2.962500	46418.02500	82.787500
std	7.221452	0.503155	0.492989	0.782624	0.66454	9075.78319	28.874102
min	18.000000	0.000000	0.000000	2.000000	1.000000	29562.00000	38.000000
25%	23.000000	0.000000	0.000000	3.000000	3.000000	38658.00000	66.000000
50%	26.000000	0.500000	1.000000	3.000000	3.000000	46617.00000	85.000000
75%	33.000000	1.000000	1.000000	4.000000	3.000000	53439.00000	94.000000
max	50.000000	1.000000	1.000000	5.000000	5.000000	68220.00000	188.000000

## TM498

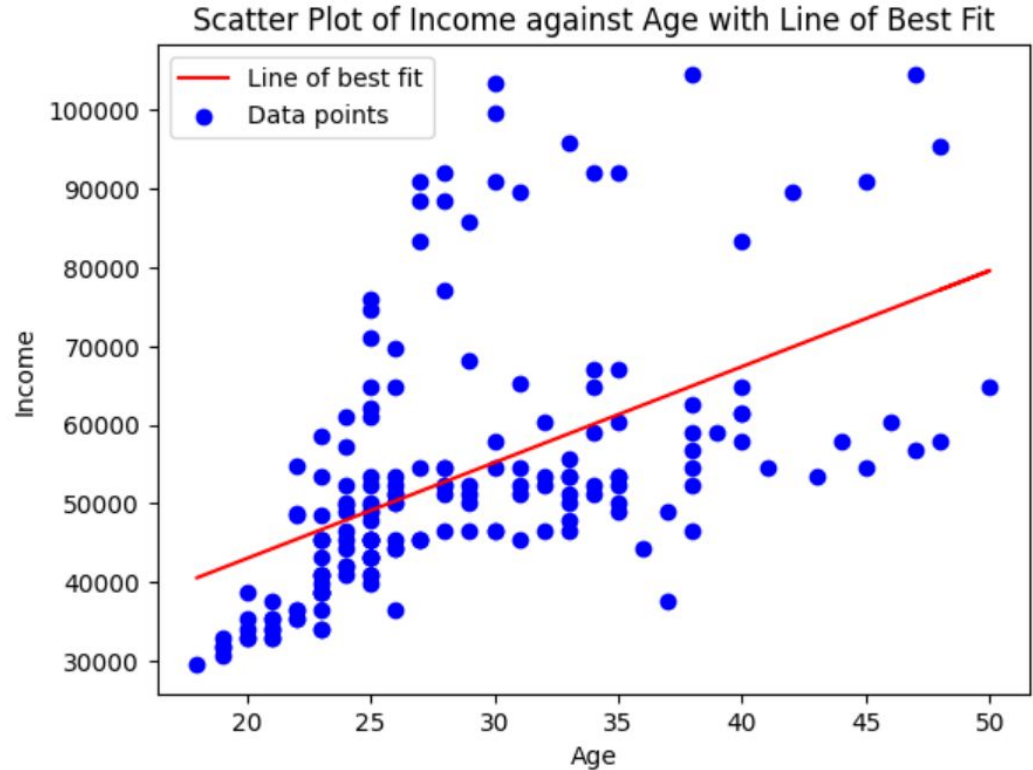
	Age	Gender	MaritalStatus	Usage	Fitness	Income	Miles
count	60.000000	60.000000	60.000000	60.000000	60.000000	60.000000	60.000000
mean	28.900000	0.483333	0.600000	3.066667	2.900000	48973.650000	87.933333
std	6.645248	0.503939	0.494032	0.799717	0.629777	8653.989388	33.263135
min	19.000000	0.000000	0.000000	2.000000	1.000000	31836.000000	21.000000
25%	24.000000	0.000000	0.000000	3.000000	3.000000	44911.500000	64.000000
50%	26.000000	0.000000	1.000000	3.000000	3.000000	49459.500000	85.000000
75%	33.250000	1.000000	1.000000	3.250000	3.000000	53439.000000	106.000000
max	48.000000	1.000000	1.000000	5.000000	4.000000	67083.000000	212.000000

## TM798

	Age	Gender	MaritalStatus	Usage	Fitness	Income	Miles
count	40.000000	40.000000	40.000000	40.000000	40.000000	40.000000	40.000000
mean	29.100000	0.175000	0.575000	4.775000	4.625000	75441.57500	166.900000
std	6.971738	0.384808	0.500641	0.946993	0.667467	18505.83672	60.066544
min	22.000000	0.000000	0.000000	3.000000	3.000000	48556.00000	80.000000
25%	24.750000	0.000000	0.000000	4.000000	4.000000	58204.75000	120.000000
50%	27.000000	0.000000	1.000000	5.000000	5.000000	76568.50000	160.000000
75%	30.250000	0.000000	1.000000	5.000000	5.000000	90886.00000	200.000000
max	48.000000	1.000000	1.000000	7.000000	5.000000	104581.00000	360.000000

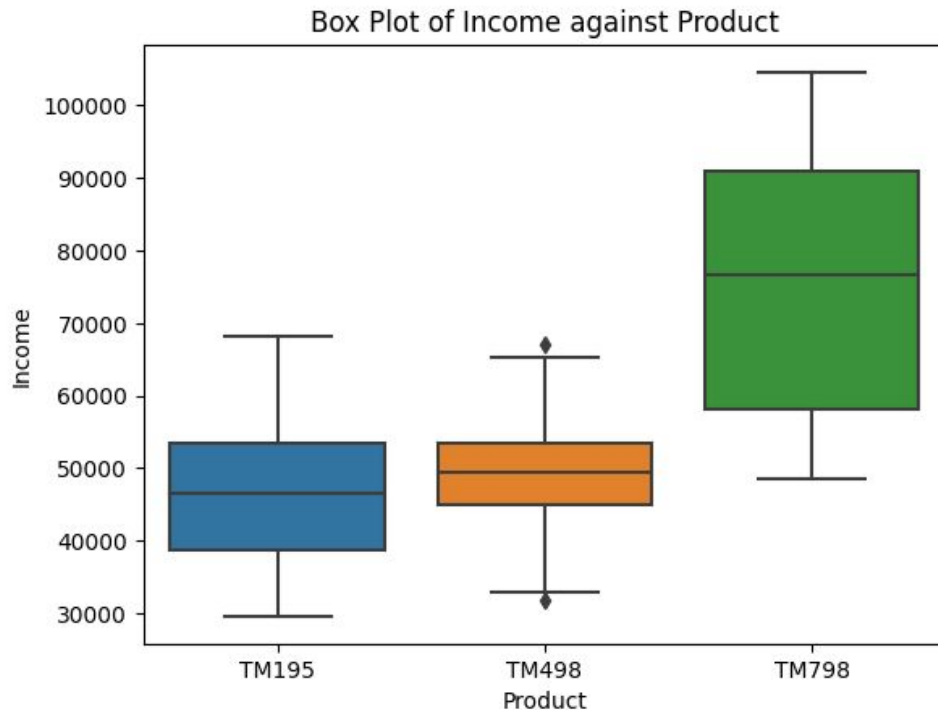
# Income & Age

- There is a positive correlation between age and income.
- This means that a younger audience is more inclined to purchase the cheaper treadmill.



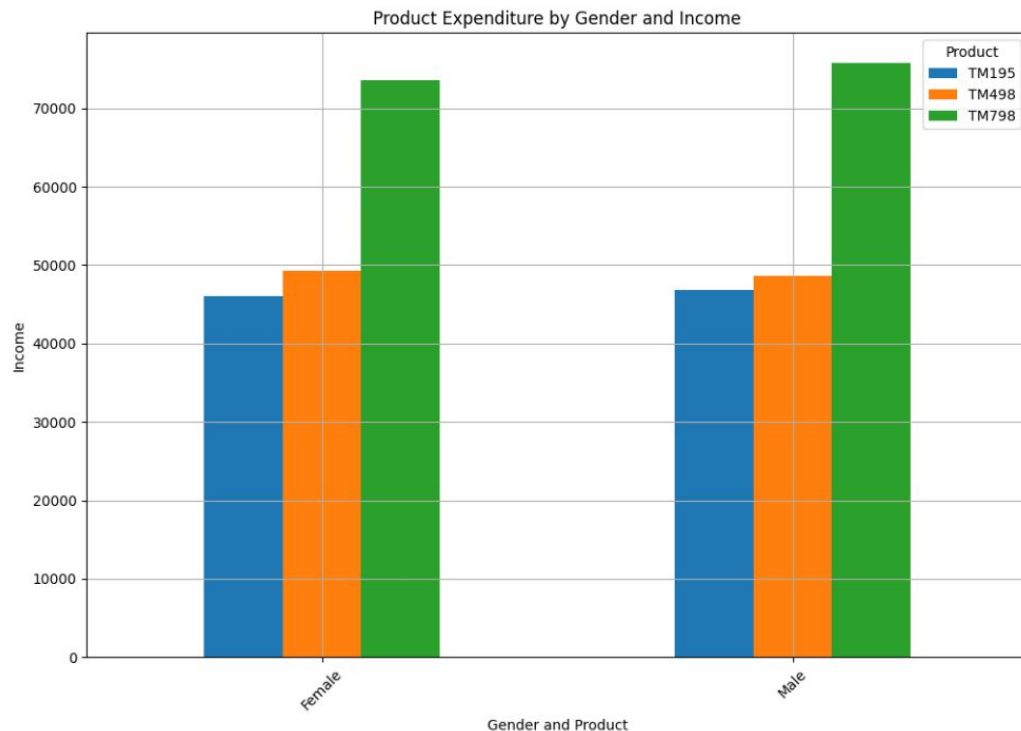
# Product & Income

- The median incomes for TM195 and TM498 are very similar, however the median of TM798 is much greater.
- TM798 has the greatest range and the greatest interquartile range.
- The only box plot with outliers is TM498. This shows some of the values present do not fit the range of values.



# Gender Income & Product Use

- We have a representation of the mean income of each gender, based on the product purchased.
- We can see that the higher the mean salary, the more likely customers are willing to buy the higher priced treadmill.



# Product Purchase Per Gender

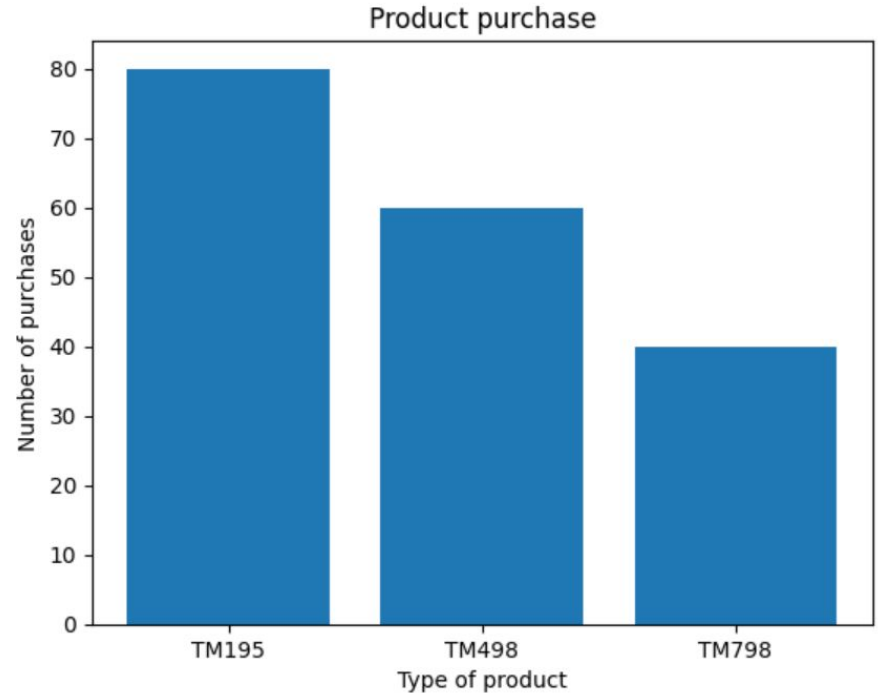
- The graph shows that most customers tend to use the TM195 treadmill. The amount of customers using TM195 is the same for both genders.
- A similar number of males and females purchased the TM498 treadmill.
- A significantly higher number of males use the TM798 treadmill compared to females.





# Most Popular Treadmill

- Most customers purchased the TM195 treadmill in comparison to the other variations (TM498 and TM798)
- In order to purchase the TM798 you would need to have a higher income.



# Conclusion

## **Impact of age on fitness**

Age has a significant impact on fitness as age and income are positively correlated which means on average older customers tend to earn more and so are more likely to purchase an expensive treadmill.

## **Impact of income on fitness**

Income also has a significant impact on fitness as those with a higher income tend to purchase the more expensive treadmill.

We also see that that the pattern of purchasing the more expensive treadmill is consistent across genders as both males and females with higher mean incomes purchase the TM798 treadmill and this will lead to a higher fitness level.

The marketing team should focus on males with higher incomes in order to increase the number of purchases for TM798 as there was a big difference. This will allow the company to save money and not waste it on audience who are not interested.