Business objective: We want to identify which of the new customers Sprocket Central Pty Ltd should target with their marketing campaign based on the historical datasets we have.

Problems:

1. Know the gender that had the highest profit in 2017
2. The age group with the highest profit in 2017
3. Wealth segment with the highest profit in 2017
4. The state with the highest profit in 2017
5. Create demographics in the order: state > wealth segment > age group > gender. This will make us know in each state, the wealth segment of customers and then their age and gender that brings the highest profit. We can know how to segment customers in each state and then produce specific marketing campaign that suit the best customers to target based on profits. We made gender to be the last segmentation because the products are not exclusively gender-based. We believe we might get more information from the age grouping that use the products than from gender segmentation.
6. Use CI to infer the population mean of profit of each of these groups to find the group with the highest mean profit.
7. Merge the total profit of each customer in 2017 and create a variable for it in customer demographics.
8. Merge customer demographics and customer address together and make profit the target variable.

Further analysis:

We could go deeper into:

1. Adding job industry and even job titles to the demographics to know which professions bring the highest profit to the company.
2. Know which brand, product line and product class each four-factor demographics order for the most.
3. Knowing the brand, product line and product class that brought the highest profit in 2017.