

## Recommendations

### 1. Impact of age on product category:

Few products category is purchased by only a specific by age group so we can promote more sales of the same categories for the same age group but for many product categories are still need to be marketized.

### 2. Marital status and purchase amount:

For various groups marital status impacts purchase amount heavily and there is a lot of potential to increase profit by focusing on peoples having higher power of purchasing.

### 3. Gender's effect on product category:

Generally, males tend to buy different product than females and this can be true for specific products however there is lot of intersection of the rest where we can generalise the strategy hence saving the resources.

### 4. How does gender impacts amount spent:

```
Confidence Intervals for the Entire Dataset:  
F: (8611.598235475956, 8848.987146921872)  
M: (9327.270601912533, 9469.283972516645)
```

We can see that CI for amount spent for male is wider than that of female and there is significant difference in amount spent so Walmart can make various marketing strategies for each group.

### 5. How does Marital Status affect the amount spent?

```
Confidence Intervals for the Entire Dataset:  
0.0: (9130.489781252667, 9289.254780711011)  
1.0: (9191.726553149285, 9383.531869323971)
```

We can see that CI for amount spent for married is wider than that of unmarried and there is significant difference in amount spent so Walmart can make various marketing strategies for each group.

### 6. How does Age affect the amount spent?

```
Confidence Intervals for the Entire Dataset:  
0-17: (8600.747254268435, 9346.465907391079)  
55+: (8905.737678498861, 9489.331008369825)  
26-35: (9153.369299461547, 9349.377087674622)  
46-50: (9069.720562284421, 9504.098309732932)  
51-55: (9222.54753418532, 9696.106090670837)  
36-45: (9118.640484429454, 9395.392166944797)  
18-25: (9022.703949885052, 9296.507422663968)
```

We can see that CI for amount spent for any age group is different amongst them and there is significant difference in amount spent so Walmart can make various marketing strategies for each group.

