Supermarket Revenue Recognition

OBJECTIVE:

Analyzed large dataset about 10,000 observations of the US Supermarket to recognize the revenue depending on various factors. Utilized Open Refine Tool extensively to sanitize the data and applied different visual models to forecast the revenue for upcoming years. Created final report to suggest the range of products and location of stores help in increasing the revenue.

DATA:

Annual Income	City	State or Province	Country	Product Family	Product Department	Product Category	Units Sold	Revenue
$30K - $50K	Los Angeles	CA	USA	Food	Snack Foods	Snack Foods	5	27.380
$70K - $90K	Los Angeles	CA	USA	Food	Produce	Vegetables	5	14.900
$50K - $70K	Bremerton	WA	USA	Food	Snack Foods	Snack Foods	3	5.520
$30K - $50K	Portland	OR	USA	Food	Snacks	Candy	4	4.440
$130K - $150K	Beverly Hills	CA	USA	Drink	Beverages	Carbonated Beverages	4	14.000
$10K - $30K	Beverly Hills	CA	USA	Food	Deli	Side Dishes	3	4.370
$30K - $50K	Salem	OR	USA	Food	Frozen Foods	Breakfast Foods	4	13.780
$150K +	Yakima	WA	USA	Food	Canned Foods	Canned Soup	6	7.340
$10K - $30K	Bellingham	WA	USA	Non-Consumable	Household	Cleaning Supplies	1	2.410
$50K - $70K	San Diego	CA	USA	Non-Consumable	Health and Hygiene	Pain Relievers	2	8.960
$30K - $50K	Beverly Hills	CA	USA	Food	Snack Foods	Snack Foods	3	11.820

Justification: Every business wants to calculate the factors responsible for recognizing the revenue based on the data collected.
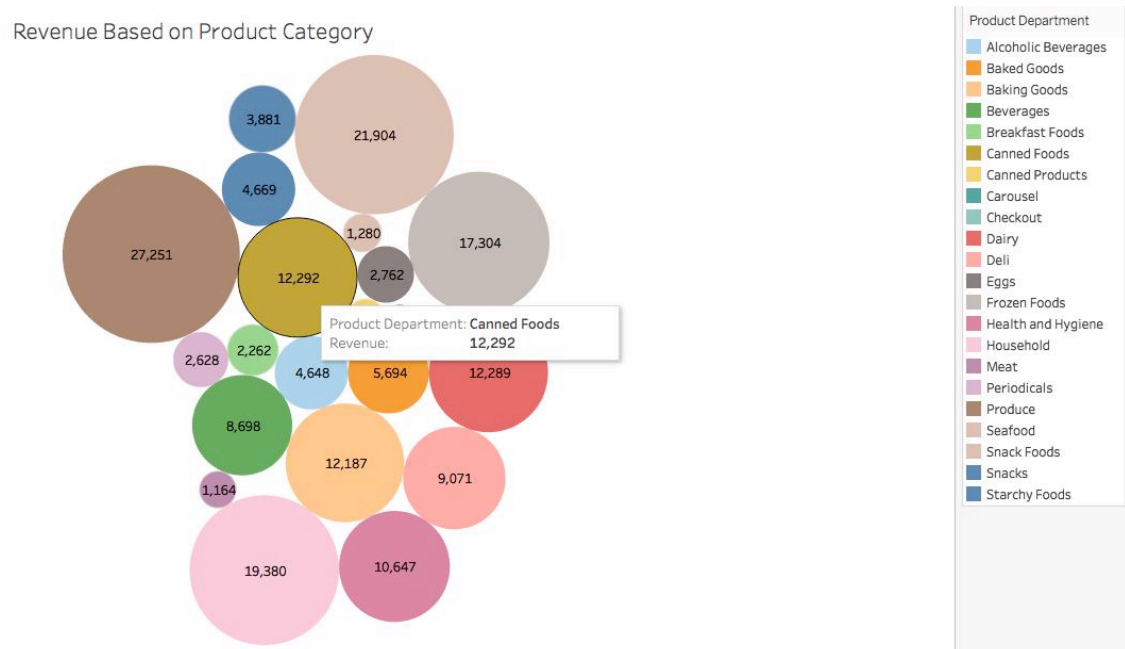
Tableau Visualization:

1. REVENUE BASED ON ANNUAL INCOME AND GENDER
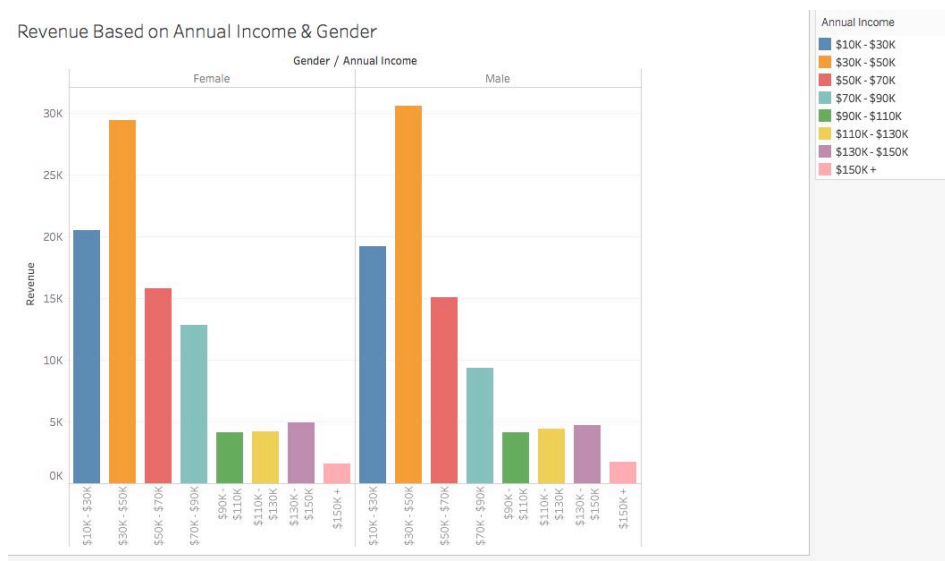
As we can infer from the above graph that the male and female from $30k-
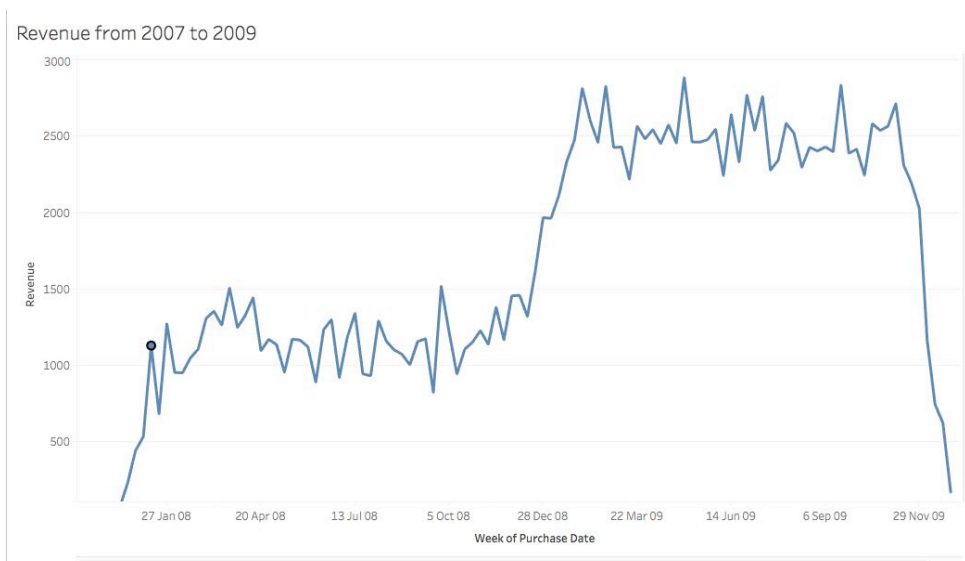$50k contributes more towards supermarket revenue.
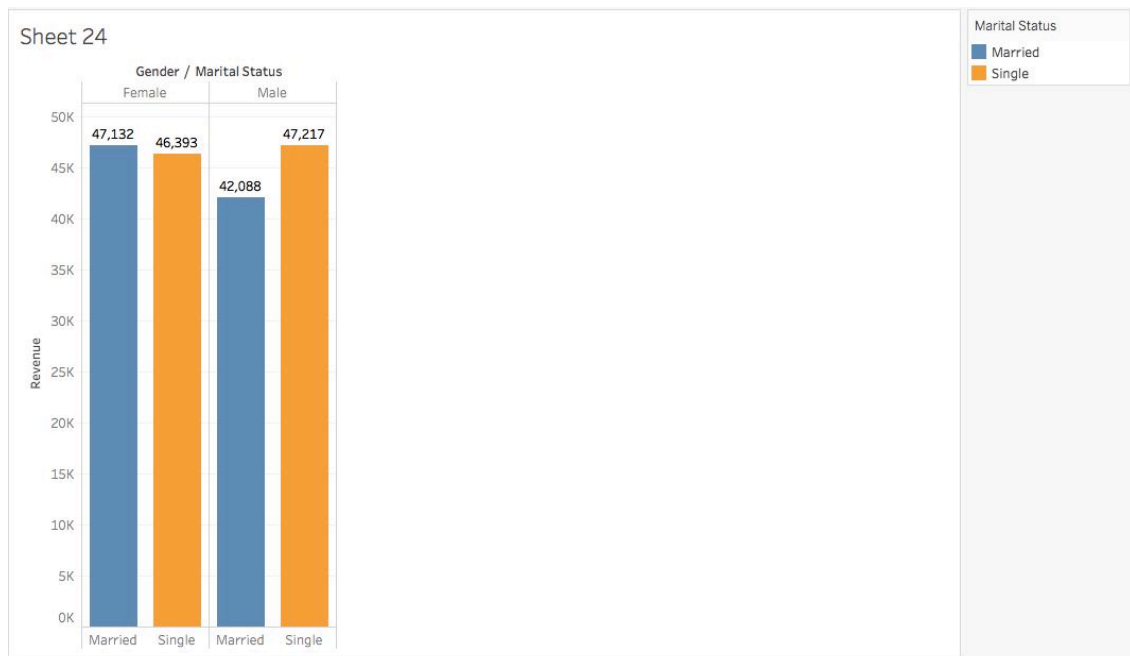
2. REVENUE BASED ON PRODUCT CATEGORY

The maximum revenue is obtained from the produce goods and the minimum
revenue is obtained from Meat product.

3. REVENUE FROM 2007 to 2009

From the time series graph of the supermarket we can recognize the falling trend of the revenue from October 2009 to 29 November 2009.

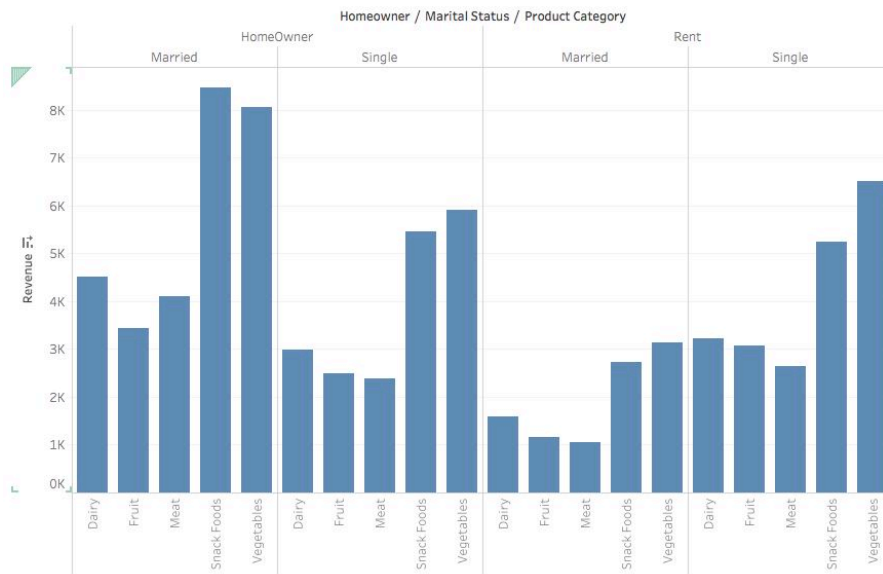## 4. REVENUE BASED ON GENDER AND MARITAL STATUS

The maximum revenue is collected from the female customers which are married and Male customers which are single.

5. REVENUE BASED ON GENDER AND PRODUCT CHOICE

On the basis of product choice, the maximum revenue is obtained from vegetables.

6. REVENUE BASED ON HOMEOWNER, MARITAL STATUS AND PRODUCT CATEGORY

On the basis of the customers owning home, Marital Status and Product category, the maximum revenue earned by the married homeowners.

Conclusions:
- Annual Income with $30k - $ 50k customers are potential buyers.
- More emphasis on Produce Goods and take care of meat products
- Take care of sudden down fall of market around Oct to Nov 2009.
- More marketing for married female customers and more options for single male customers.
- More options for vegetable products since the sales of the vegetables are maximum.
- Snacks food options should be increased to upscale the revenue for married Homeowner.