
Food Sales Predictions

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What is the purpose and goal of this project?

Purpose: The food sales prediction project consisted of using Python to build predictive models for Outlet Sales, over the last 6 weeks this data was cleaned, organized, and analyzed to make sure of proper performance of the analytical process.

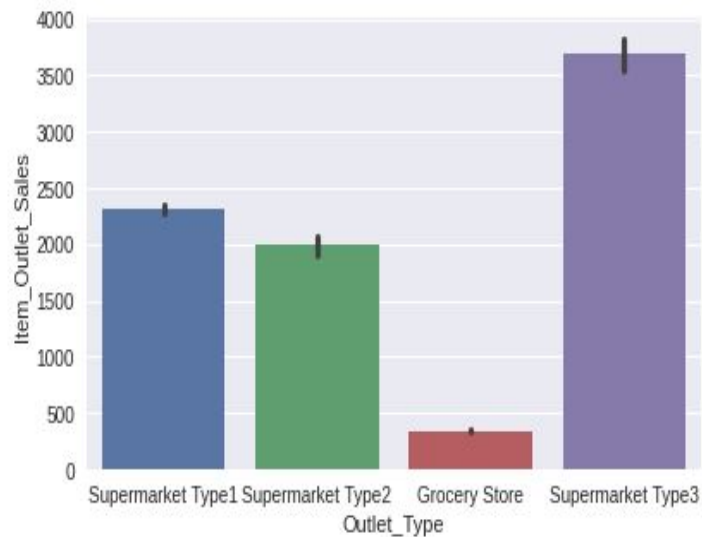
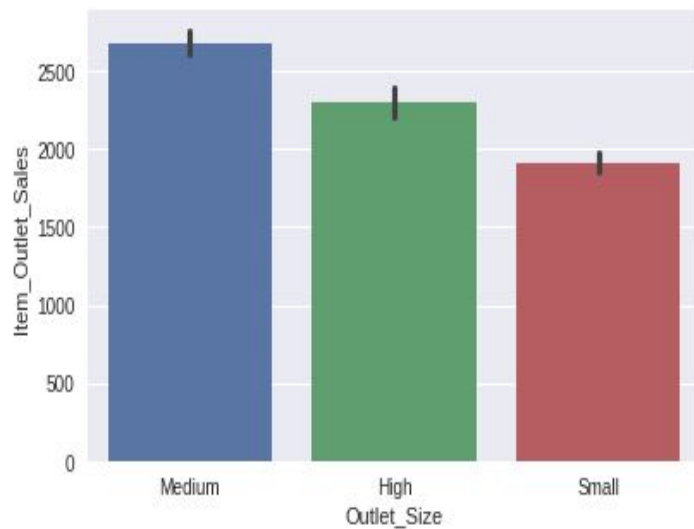
Goal: To use different models to help increase future Outlet Sales.

Different Variable Types

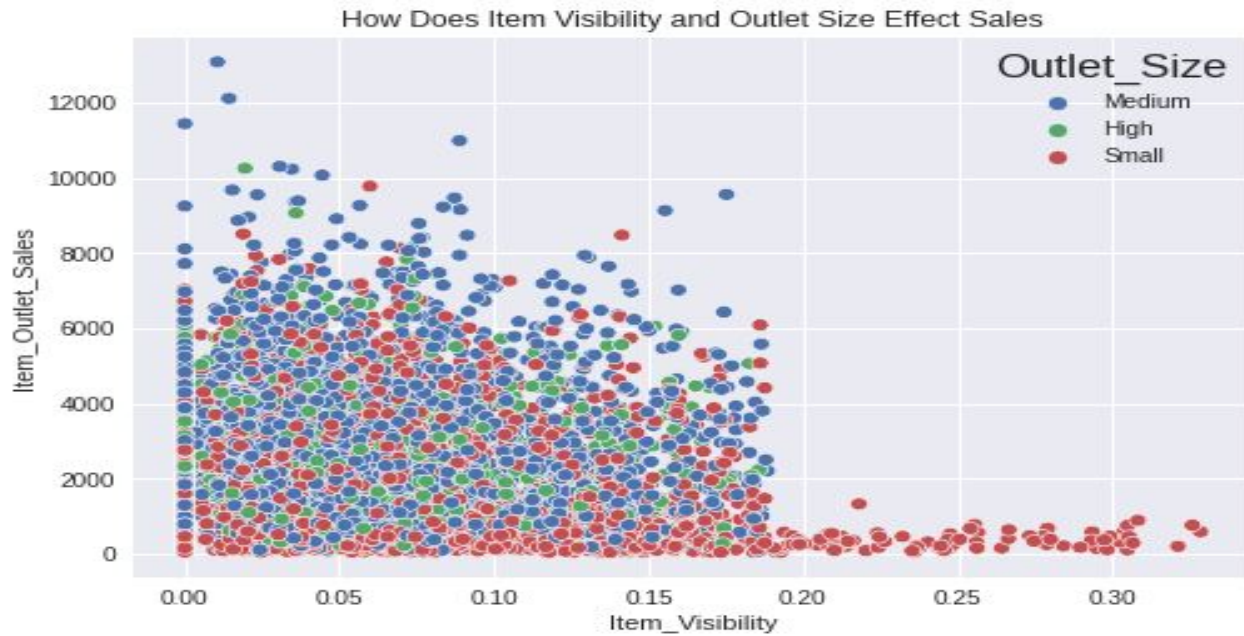
Variable Name	Description
Item_Identifier	Unique product ID
Item_Weight	Weight of product
Item_Fat_Content	Whether the product is low fat or regular
Item_Visibility	The percentage of total display area of all products in a store allocated to the particular product
Item_Type	The category to which the product belongs
Item_MRP	Maximum Retail Price (list price) of the product
Outlet_Identifier	Unique store ID
Outlet_Establishment_Year	The year in which store was established
Outlet_Size	The size of the store in terms of ground area covered
Outlet_Location_Type	The type of area in which the store is located
Outlet_Type	Whether the outlet is a grocery store or some sort of supermarket
Item_Outlet_Sales	Sales of the product in the particular store. This is the target variable to be predicted.

How can we increase sales?

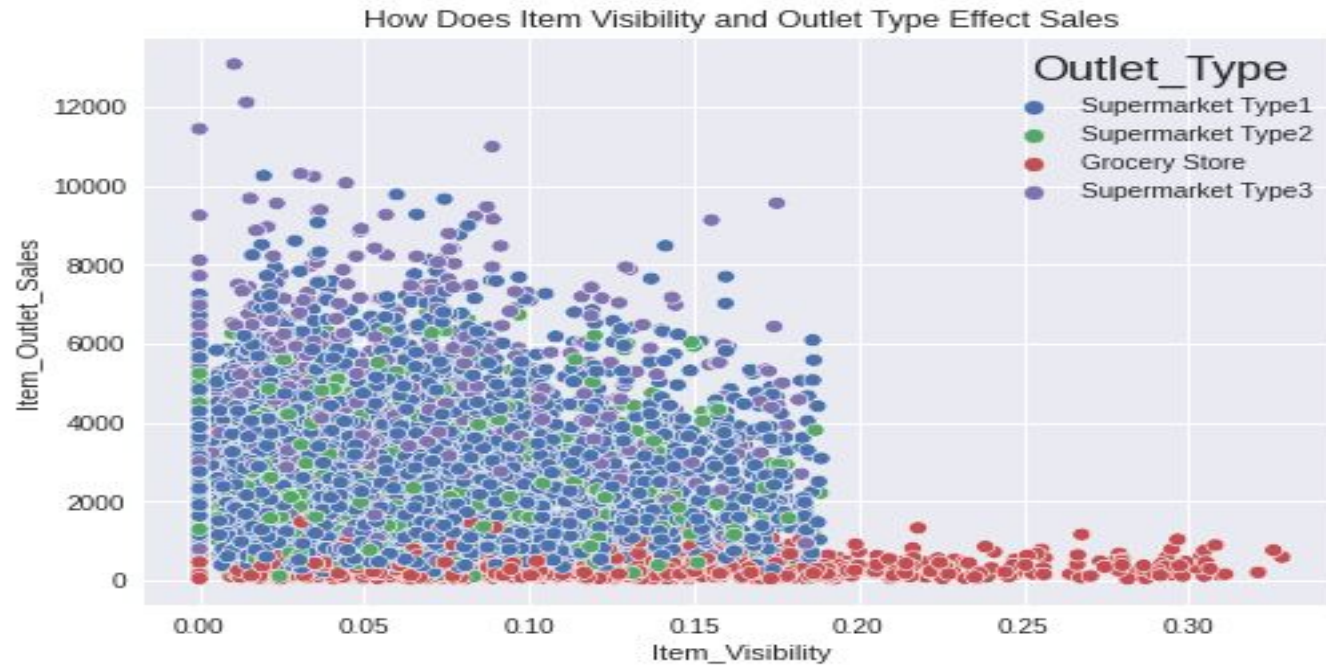
Does Outlet Size or Outlet Type Effect Sales



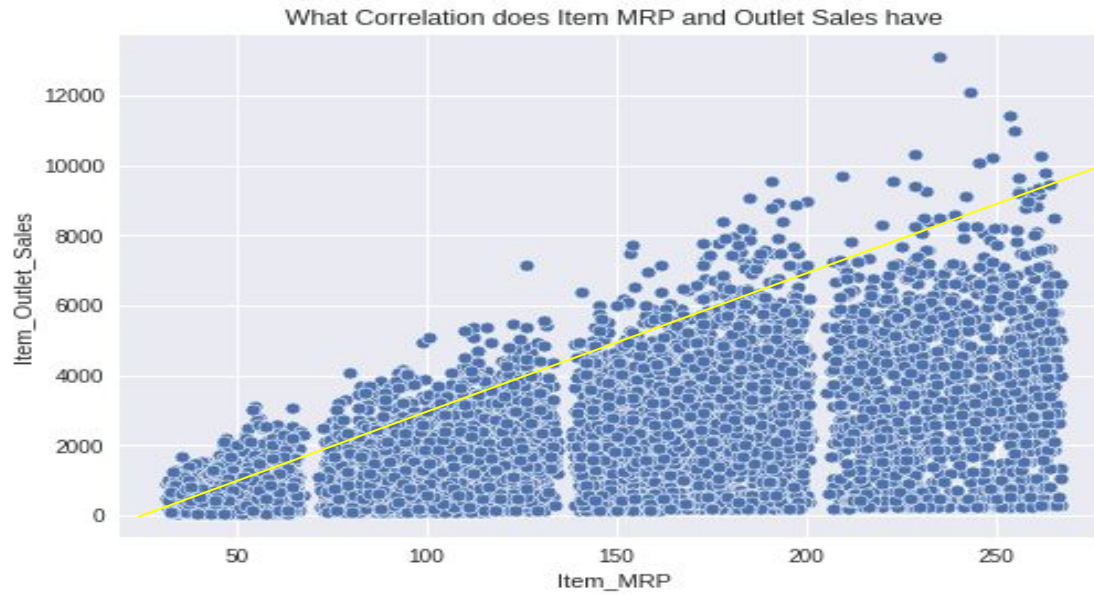
- We can see that Outlet Size as well as Outlet Type do have an effect on sales.



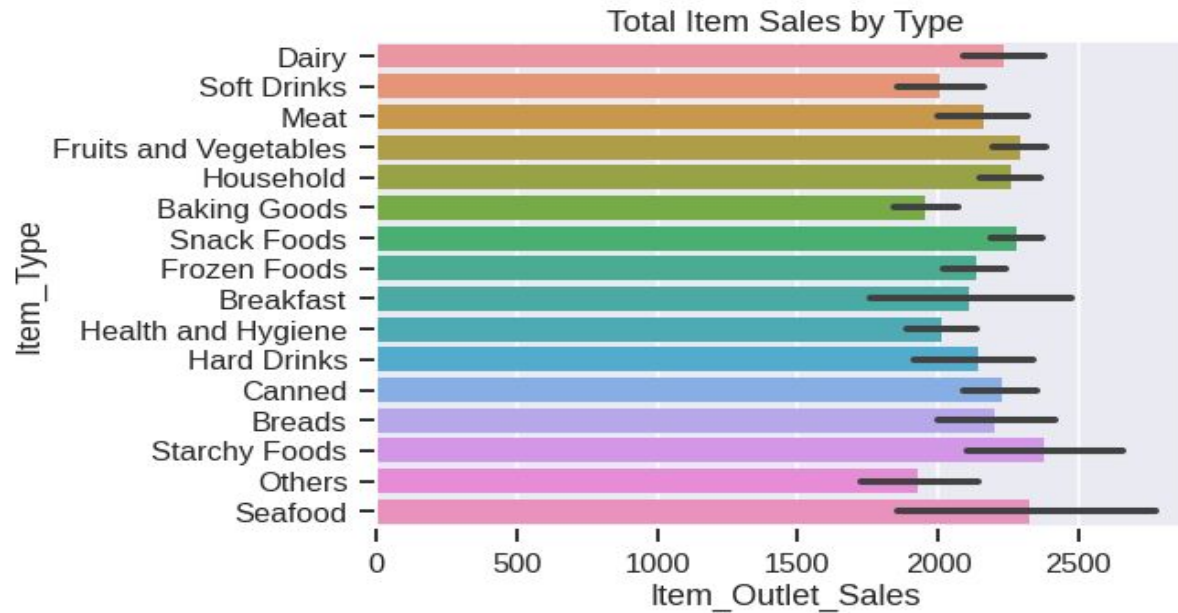
- We can see from the model above that Outlet Size does have an effect on sales as well as the visibility of the item.



- From the above model we can see that the Outlet Type does in fact have an effect on sales as well as the visibility of the item.



- Item MRP has a positive correlation with Outlet Sales in that the higher the MRP value is the more sales that Item has.



- We can see from this graph that certain items do see an increase in sales compared to other items.

Overall how do we increase future Sales?

- Opening more Medium and High Size stores would help increase sales as those were seeing the most sales.
- Opening more SuperMarket Type 3 stores and less Grocery Stores as we are seeing a significant amount of sales at the SuperMarket Type store compared to the Grocery Store.
- Increase the amount of items with low visibility and higher sales so there can be more of these items on the shelves.
- Decrease the amount of items with High Visibility and low sales as they are just taking up space that could be otherwise utilized for high sale and low visibility items.
- Offering more Items with a Higher MRP as those items have Higher Sales.
- A larger focus on specific high selling items like Seafood, Starchy Foods, and Fruits & Vegetables.