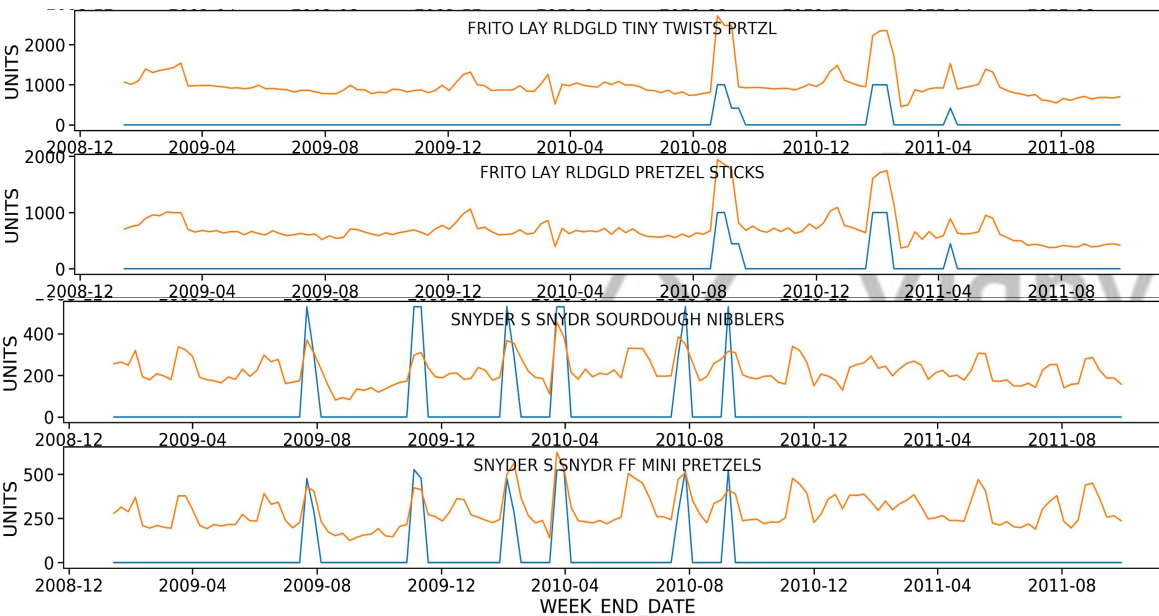


# Summarizing Data Exploration Insights

# Hypothesis Generation

- Weekly Sales Data
  - Offer Applicable: Featured Products with attractive offers will have higher sales
  - Product Promotion: Sales will be more for products with in-store promotion

# Featured Products

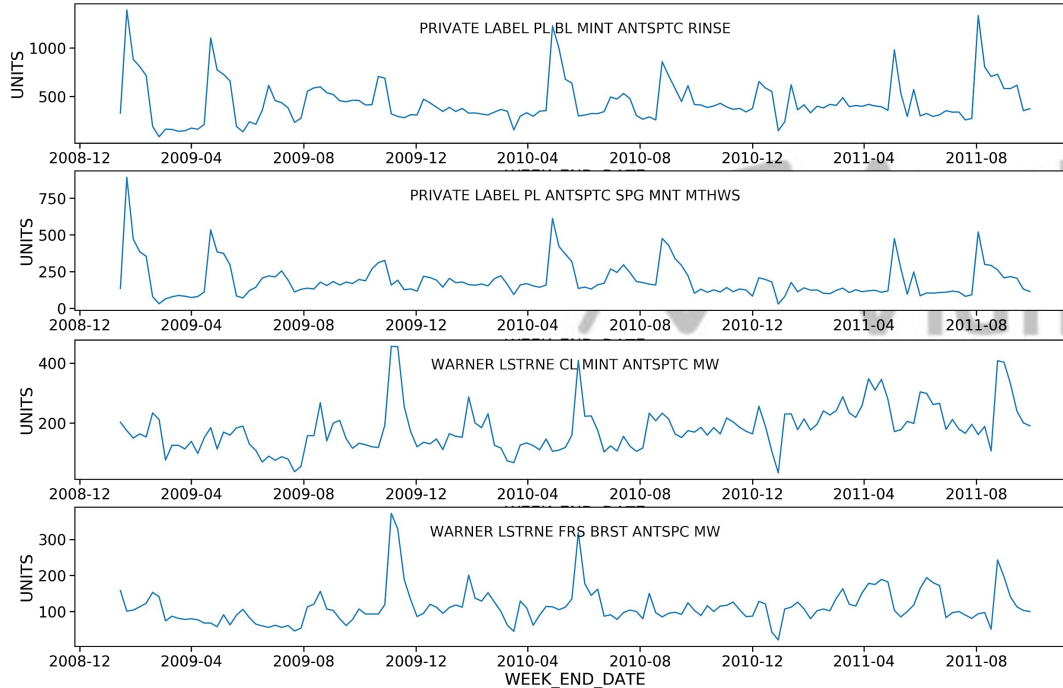


- Individual product promotion have huge impact on sale
- Display/featured product have higher sale

# Hypothesis Generation

- Product Data
  - **Product type/ Category : Different Product Categories can have significantly varying trends/patterns**
  - Price of Product: Same category products with lower price have more sales
  - Product Size : Larger products should be more in demand
  - Company/ Manufacturer: Well known brands will have higher sales

# Weekly Average Sale

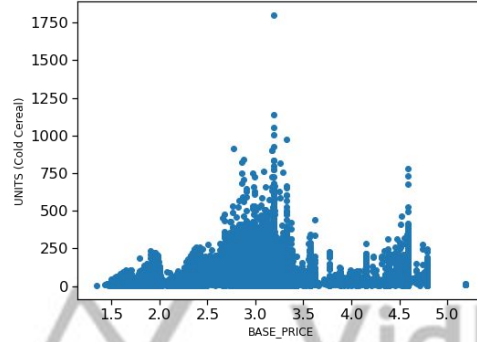
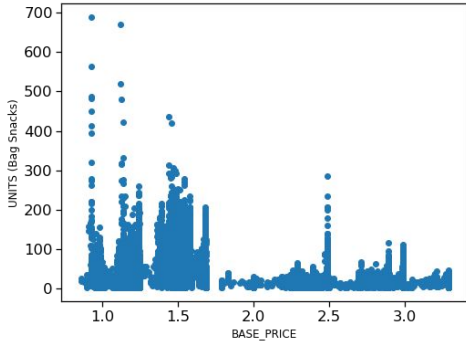


- No significant trend or seasonality overtime
- Products by similar manufacturer follow same pattern

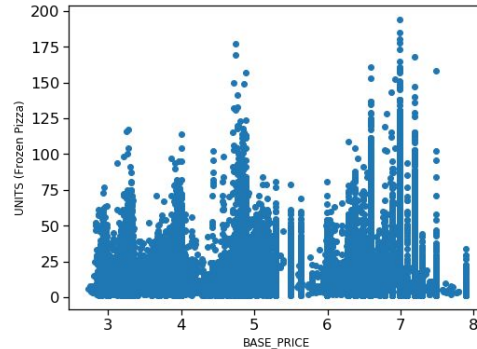
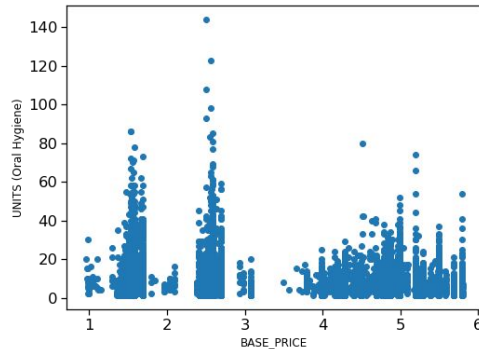
# Hypothesis Generation

- Product Data
  - Product type/ Category : Different Product Categories can have significantly varying trends/patterns
  - **Price of Product: Same category products with lower price have more sales**
  - Product Size : Larger products should be more in demand
  - Company/ Manufacturer: Well known brands will have higher sales

# Sales Variation with Base Price



- Cold Cereal, Bag snacks and oral hygiene products with lower price have higher sales



- Frozen pizza items have higher sale for higher priced pizzas

# Hypothesis Generation

- Product Data
  - Product type/ Category : Different Product Categories can have significantly varying trends/patterns
  - Price of Product: Same category products with lower price have more sales
  - **Product Size : Impact of product size on demand**
  - Company/ Manufacturer: Well known brands will have higher sales



# Sales for different Product Size

PRODUCT\_SIZE 22.7 OZ 28.3 OZ 29.6 OZ 29.8 OZ 30.5 OZ 32.7 OZ

CATEGORY

FROZEN PIZZA	3641	10767	9989	9126	8131	18743
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PRODUCT\_SIZE 12 OZ 12.2 OZ 12.25 OZ 15 OZ 18 OZ 20 OZ

CATEGORY

COLD CEREAL	10786	10766	21426	10785	32203	10789
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PRODUCT\_SIZE 10 OZ 15 OZ 16 OZ

CATEGORY

BAG SNACKS	6916	28921	21443
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PRODUCT\_SIZE 1 LT 500 ML

CATEGORY

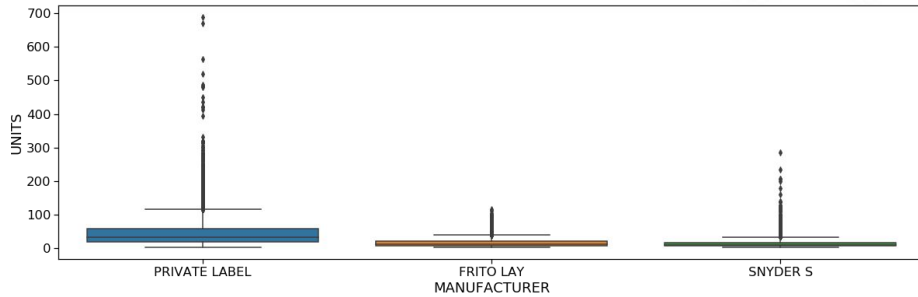
ORAL HYGIENE PRODUCTS	7926	9928
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- Increase in Product Size does not show increase in demand

# Hypothesis Generation

- Product Data
  - Product type/ Category : Different Product Categories can have significantly varying trends/patterns
  - Price of Product: Same category products with lower price have more sales
  - Product Size : Larger products should be more in demand
  - **Company/ Manufacturer: Well known brands will have higher sales**

# Sales for Different Manufacturers

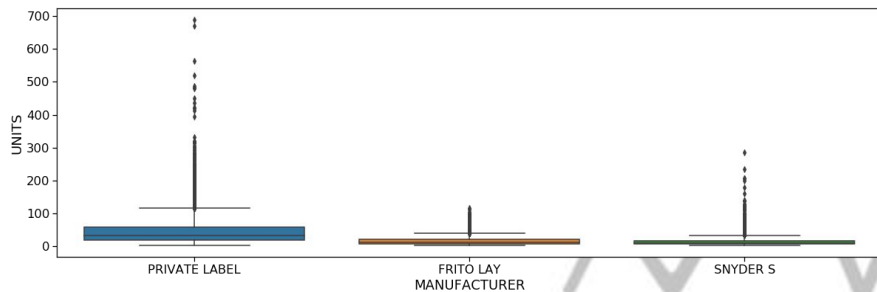


- Sales vary for different manufacturers
- Private Label has highest sales and

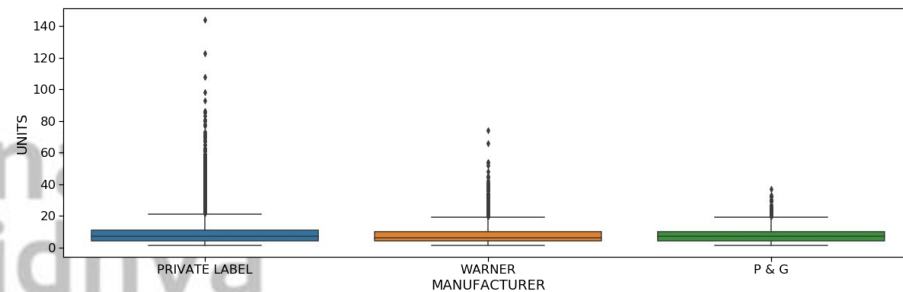
Frito Lay has lowest sales for pretzels

# Sales for Different Manufacturers

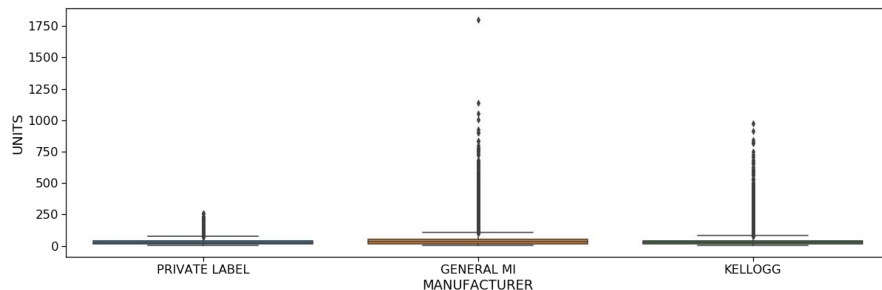
## Bag Snacks



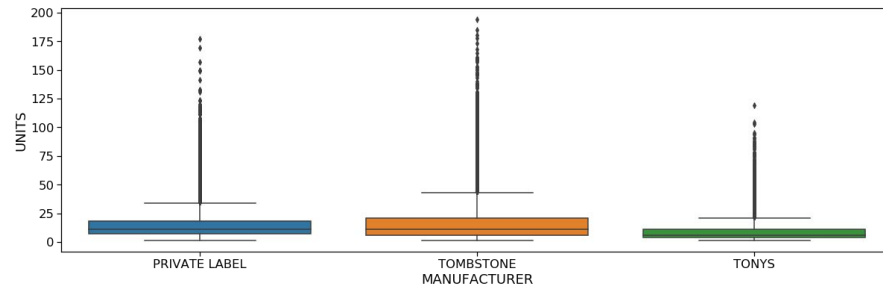
## Oral Hygiene



## Cold Cereal



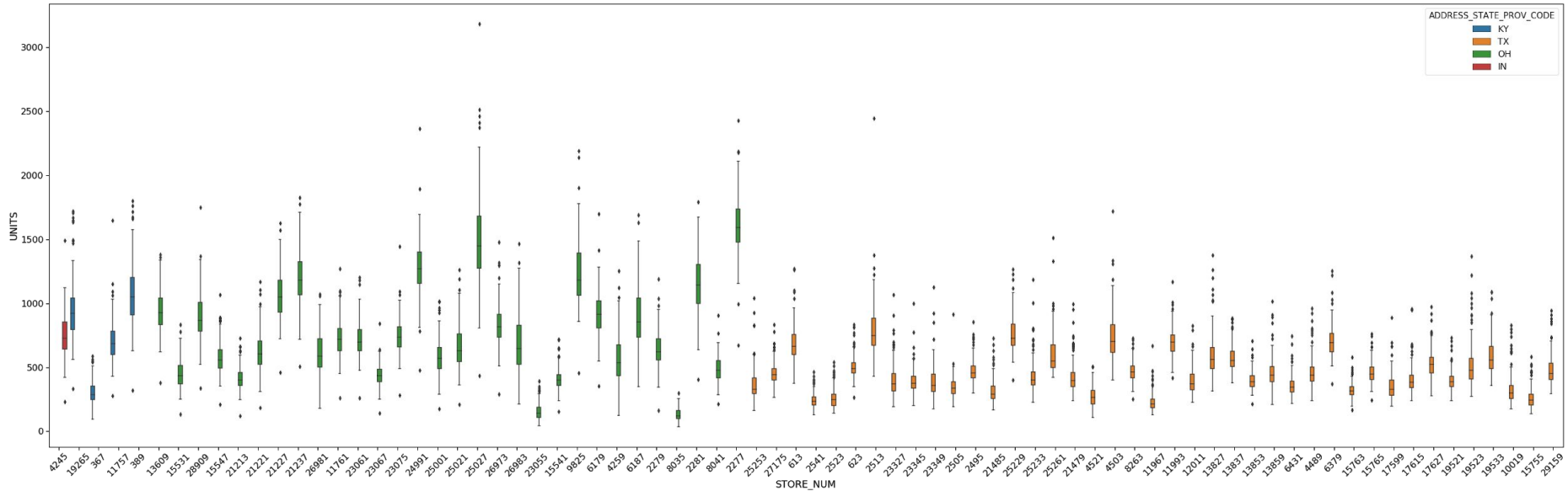
## Frozen Pizza



# Hypothesis Generation

- Store Data:
  - **Store Location: Stores in a particular state/city will have a similar trend**
  - Size of Store: Stores with larger area would have more sales
  - Average Wait time: Lower wait time, higher units sold.

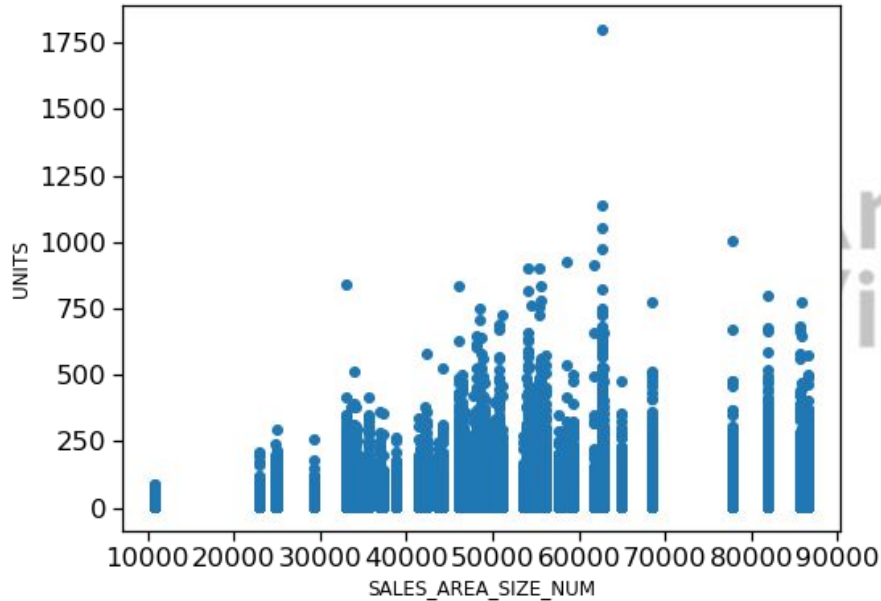
# Store-wise unit sales for States



# Hypothesis Generation

- Store Data:
  - Store Location: Stores in a particular state/city will have a similar trend
  - **Size of Store: Stores with larger area would have more sales**
  - Average Wait time: Lower wait time, higher units sold.

# Unit Sale variation with Store Size



- Average Size stores have highest sales
- Small Sized stores have very low sale



