

BK Veggie Burger Insights to CEO

- **Overview:**

McDonalds has continued making food for consumers in many different districts, specifically in the North East, North West, South East, South West, and Central districts. Our competitor Burger King has released the Impossible Burger as of October 2018 and we need to draw conclusions on how this will affect our sales at McDonalds. We will check for effects on the sales of our hamburgers, chicken fillets, and fish fillets.

As we are worried that different populations may contain more people interested in becoming vegan, there may be a regional dip in sales. I will study the different districts and gather insights on constructed visualizations. On top of that in our to differentiate from the standard trends from the trends after the release of the Impossible Burger, I will draw conclusions based on hypothesis testing of the data.

- **Analysis:**

A. *Geographical Analysis:*

Most regions and products were consistent on a month to month basis. There was a definite dip they all shared on the month of October 2018. The fish fillets, our most popular product, took the biggest hit but stabilized like all of the other products in the subsequent months. The north east district seems to be our most popular district and the BK Impossible Burger hasn't changed that. Although our sales aren't at the highest they've been since October 2018, our sales seem to be following the standard trends.

B. *Hypothesis Testing:*

I used a confidence interval to check if the data was within 2.5% and 97.5% percentile of the standard sales (p-value of .05). Also I only included the months starting from August 2017, since our sales picked up from there and we need to know if its being maintained. I found that our sales are below average, later months fell back into the average sales but in the beginning our sales took a dip. I cannot conclude that the cause was the BK Impossible Burger but we can associate our fall in sales to the time of its release.

- **Suggested Answer:**

From the data I've drawn it appears that the BK Impossible Burger doesn't seem to be drastically hurting our sales and you can be confident in that. Our sales have already recovered and no change is necessary. There does seem to be a benefit to vegan menu items. We could take sales from our competitors by introducing vegan items, which promote interest in our hamburgers, fish fillets, and chicken fillets. Which may also appease our shareholders. But there is nothing wrong with maintaining our culture and investors can be confident in our current sales.