1. **Analysis of all the visualizations with respect to how it is helping you find the Key Performance Indicators and the causes of various problems identified.**

Worksheet 1

The visualisation titled 'Revenue Trends' shows that the revenues of all the three stores was similar until the middle of February and then the revenues seemed to improve for one store, deteriorate for one and remained almost same for the third. Thus, this helps in visualising revenues across all three stores, i.e., the sale details. The reason for changes in revenue can further be visualised to identify problems using another visualisation.

The visualisation titled 'Avg Revenue vs Avg Order Count by Day of Week' compares the average order counts and average revenues across all the three locations for specific days of the week. The color tells the average revenue and the size of each box indicates the average order count for that day in a specific location. This indicates the days of highest revenues and so the stores can bring promotional offers accordingly and improvise their orders and hence revenues, i.e., service plan.

The visualisation titled 'Order Count and Item Count correlation' shows how order count and item count are related. There are multiple items per order. This can be used to visualise how the item count and order count are related for each store. 'Lower Manhattan' processes a very few number of orders and thus fewer items as compared to the other two. Thus, this store is less popular. This could be due to poor quality, poor taste, less population, etc. These problems need to be further analysed.

Worksheet 2

The visualisation titled 'Avg Scores by Zipcode' shows the zip codes of New York colored by the average health inspection score of the restaurants in that area. The lower the score, the better the grade, so lower numbers are green and higher numbers are red. This indicates which restaurants need attention in terms of quality.

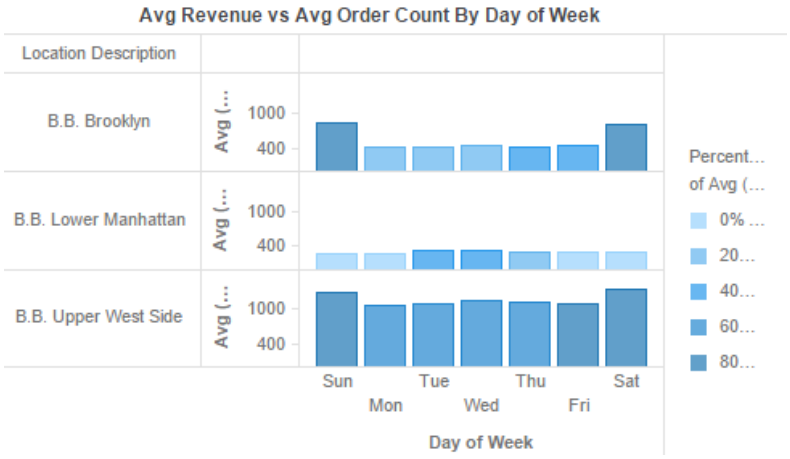
The 'Revenue Performance vs Avg Health Score' visualisation shows how health inspection results affected the revenue performance of each restaurant location. The score above the reference line receives the lowest grade. The revenue is heavily impacted by this score and so this is the main cause of revenue changes for the three stores.

The visualisation titled 'Avg Scores by Boro' can be used to visualise the popularity of cuisine types according to borough based on the average scores. The color of the bubbles indicates the borough, the number on each indicates the cuisine type and the size of each bubble indicates the average score. This can be used to identify the preferred cuisine types and the problems with cuisine types so that the quality and quantity of these can be improved for a better customer experience.

2. **What more could you have done other than what is included in the exercise to achieve better analysis of both the datasets?**

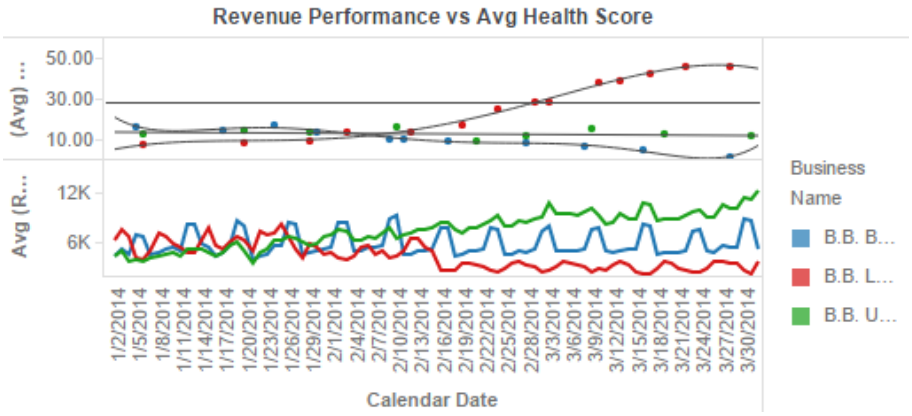
For a better analysis we could've plotted the average revenues against the average order counts on the basis of calendar dates for the three stores (bubble graph) to obtain a better understanding of how many orders were they processing each day and what their revenues were. This would give us an idea about the customer satisfaction of the stores.

Also, the ‘Avg Revenue vs Avg Order Count by Day of Week’ analysis can be done using a column chart as shown below:



This gives us a clear indication of the average revenues (color of each box) and average order count (size of each box) for each day of week.

The visualisation ‘Revenue Performance vs Avg Health Score’ can also be viewed using the line chart and trend lines as below:



This shows the impact of average scores on average revenues in an easy to understand way.