

Task 1.6

Scenario 1:

1. The analyst team should perform a Diagnostic analysis for this, as the marketing team is already aware of the drop in sales, they need to understand why it happened, hence the diagnostic analysis.
2. When looking for a detailed overview of why something has happened there are many different variables to investigate and patterns to look for. Therefore, a multivariable analysis is more appropriate for this scenario.
3. The 3 questions I would like to ask to get started on the analysis and why:
 - Do they have any other games of a different genre? If yes, how are sales for those in the same year? Are the sales down only for puzzle games?
 - Puzzle games sales reports for the other publishers to get a better understanding of the period.
 - Data related to any significant changes in marketing strategies or advertising spend for puzzle games, upgrades made in the game and change in prices. Which might have impact on the sales.

Scenario 2:

1. Prescriptive analysis since the team already knows that introducing new games will improve the sales but they need help with understanding how and which games to introduce while adjusting for other costs like transportation. Descriptive analysis will also be helpful to understand the which new games to be introduced.
2. Inferential statistics with a multivariable analysis is better suited for this scenario
3. The 3 questions I would like to ask to get started on the analysis and why:
 - What have been the highest selling genre of games in the local market over a period of last 5 years where they need to be introduced. How many numbers of games were sold.
 - What are the shipping cost to the listed cities, along with the game costs, so that the most effective ones can be recommended considering the profit margins.
 - Data related to the sales figures in the listed cities for the time of the year to know the trend around holiday seasons.

Scenario 3:

1. Descriptive analysis to understand what happened in the past will be helpful.
2. A Bivariate analysis for the sales figures depending on the month of the year.
3. The 3 questions I would like to ask to get started on the analysis and why:
 - How many years of sales data do I need?
 - The highest selling genres of games and their monthly sales data for the last 5 years to spot the trends in market.

Scenario 4:

1. Predictive analysis as we want to predict potential sales before, during and after the Olympic games.
A combination of descriptive and inferential statistics to infer what may happen outside our sample.
2. Inferential statistics with multivariate analysis.
3. The 3 questions I would like to ask to get started on the analysis and why:
 - Sales data for the last 5-10 years to spot the trends around the Olympic games.
 - Sales data around major holidays or sales to understand the trends.
 - Data related to the sports game's prices and sales in the past to better anticipate the increase in game sales.